

Figure 1

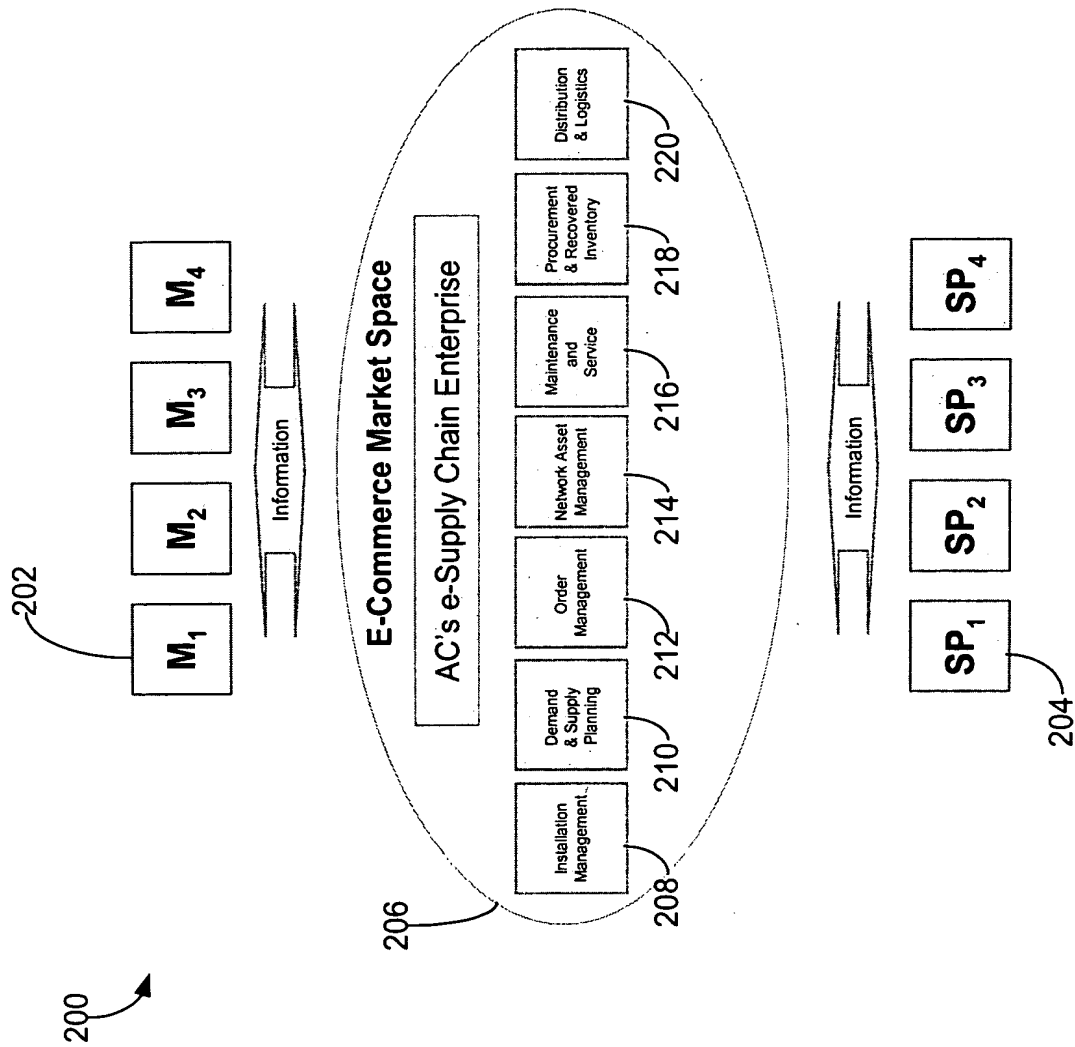


Figure 2

300

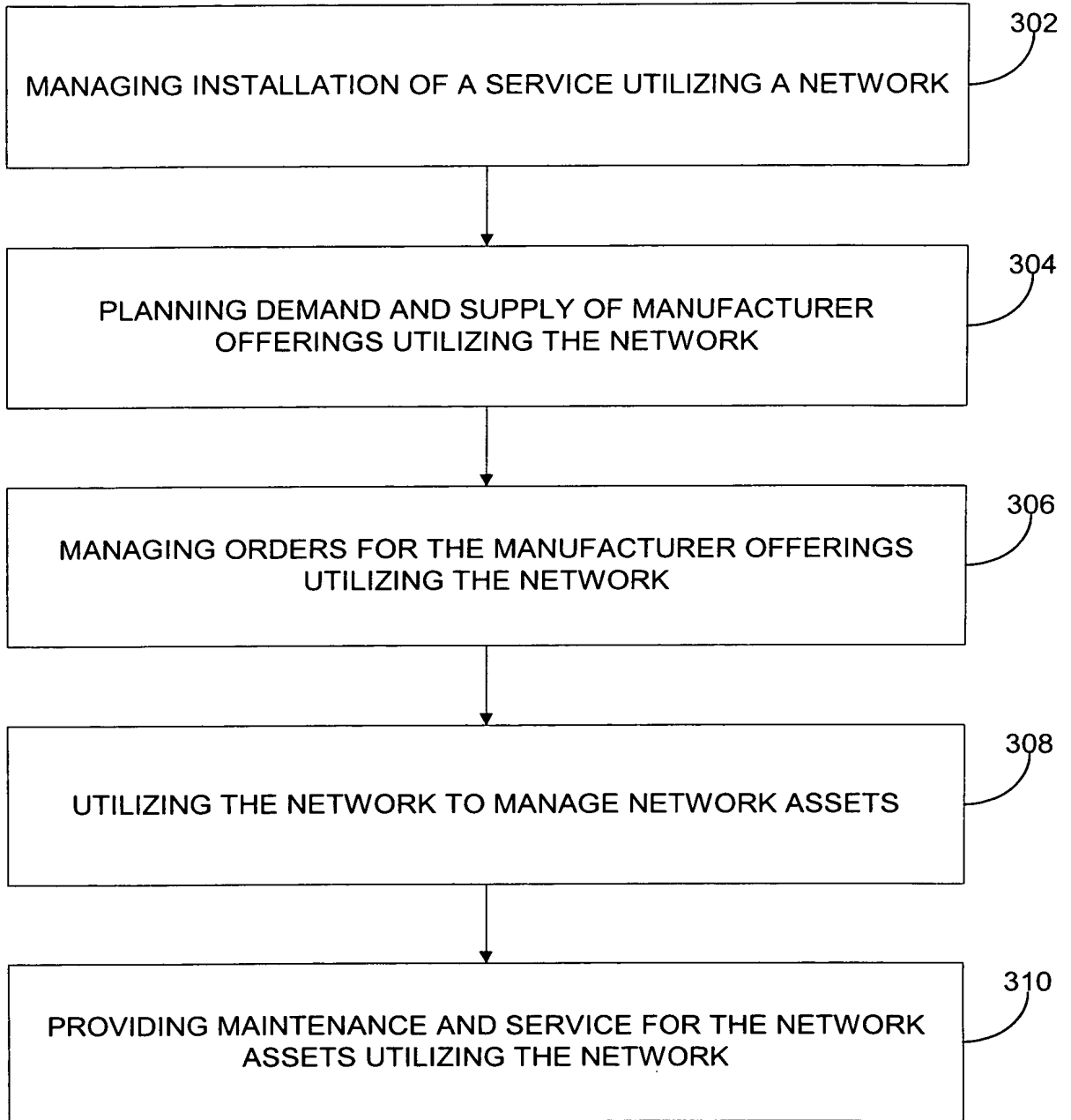


Figure 3

FIG. 4 is a block diagram of a system 400 for managing a network of assets. The system 400 includes a network 402, a network management system 404, and a network service system 406. The network 402 is connected to the network management system 404, which is connected to the network service system 406. The network management system 404 includes a network management module 408, a network asset management module 410, an order management module 412, a demand & supply planning module 414, and a maintenance and service module 416. The network service system 406 includes a network service module 418, a network asset management module 420, an order management module 422, a demand & supply planning module 424, and a maintenance and service module 426. The network management system 404 and the network service system 406 are connected to each other via a network 402.

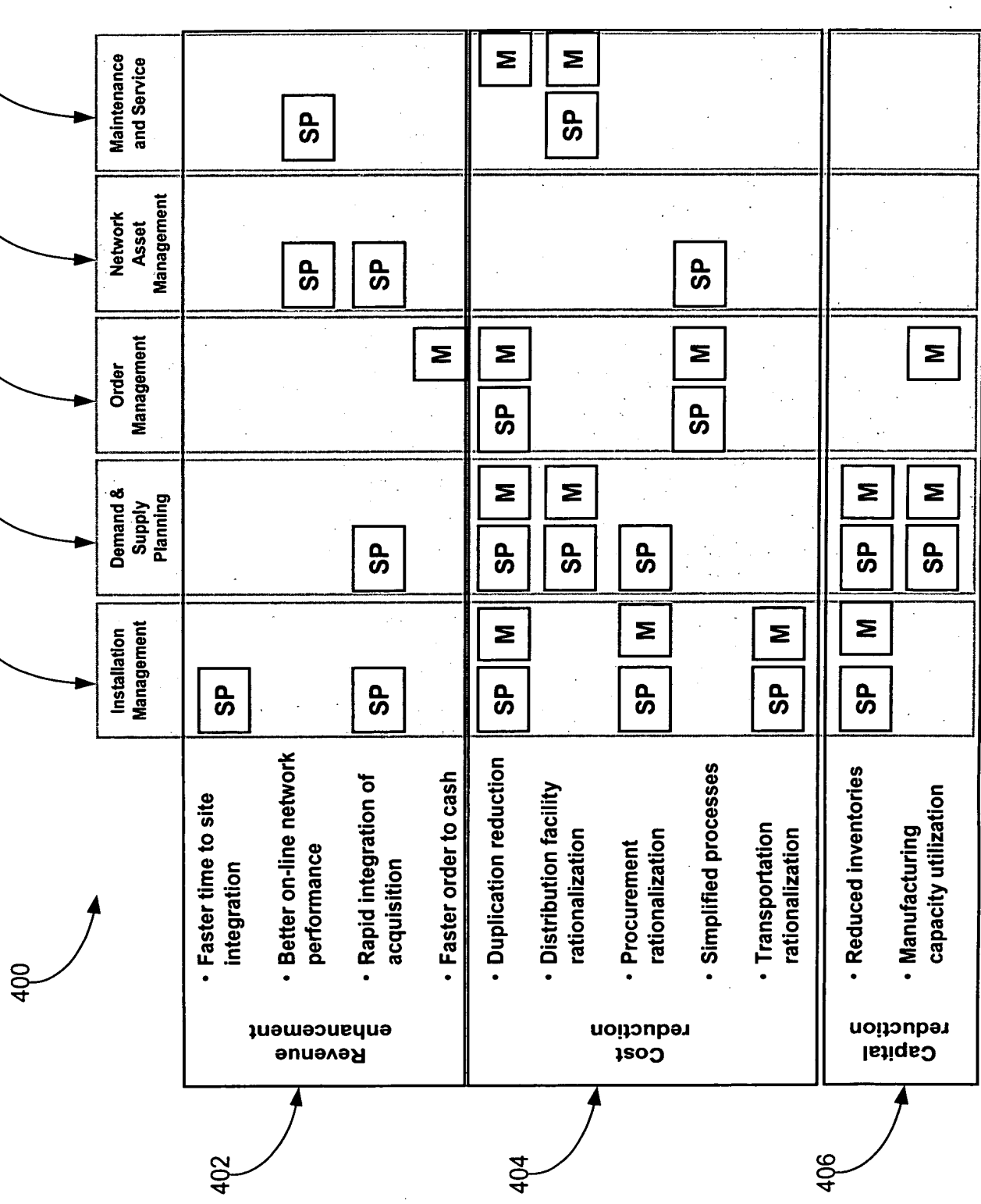


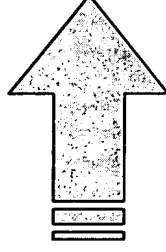
Figure 4

Core Competencies

Service Provider
<ul style="list-style-type: none"> • New customer acquisitions • New customer segmentation strategy • Strategic technology mgmt • Technology life cycle management • New service offerings

502

- Network is planned based on a capability, (i.e. capacity and features)



- Availability of sites is synchronized with the network roll out
- Joint optimization of network assets

504

Manufacturer
<ul style="list-style-type: none"> • Focus on managing the customer relationship • Focus on managing production capacity • Focus on R & D • Focus on market coverage roll out

New Business Relationships

Service Provider
<ul style="list-style-type: none"> • Provide an open access channel for new service offerings from the manufacturer • Move to a focus on platform release strategy in line with service offerings

506

Manufacturer
<ul style="list-style-type: none"> • Gain the potential to reposition the network as a platform for their solutions pipeline • The ability for the manufacturer to build strategic alliances with solution integrators becomes a critical differentiator

508

Figure 5

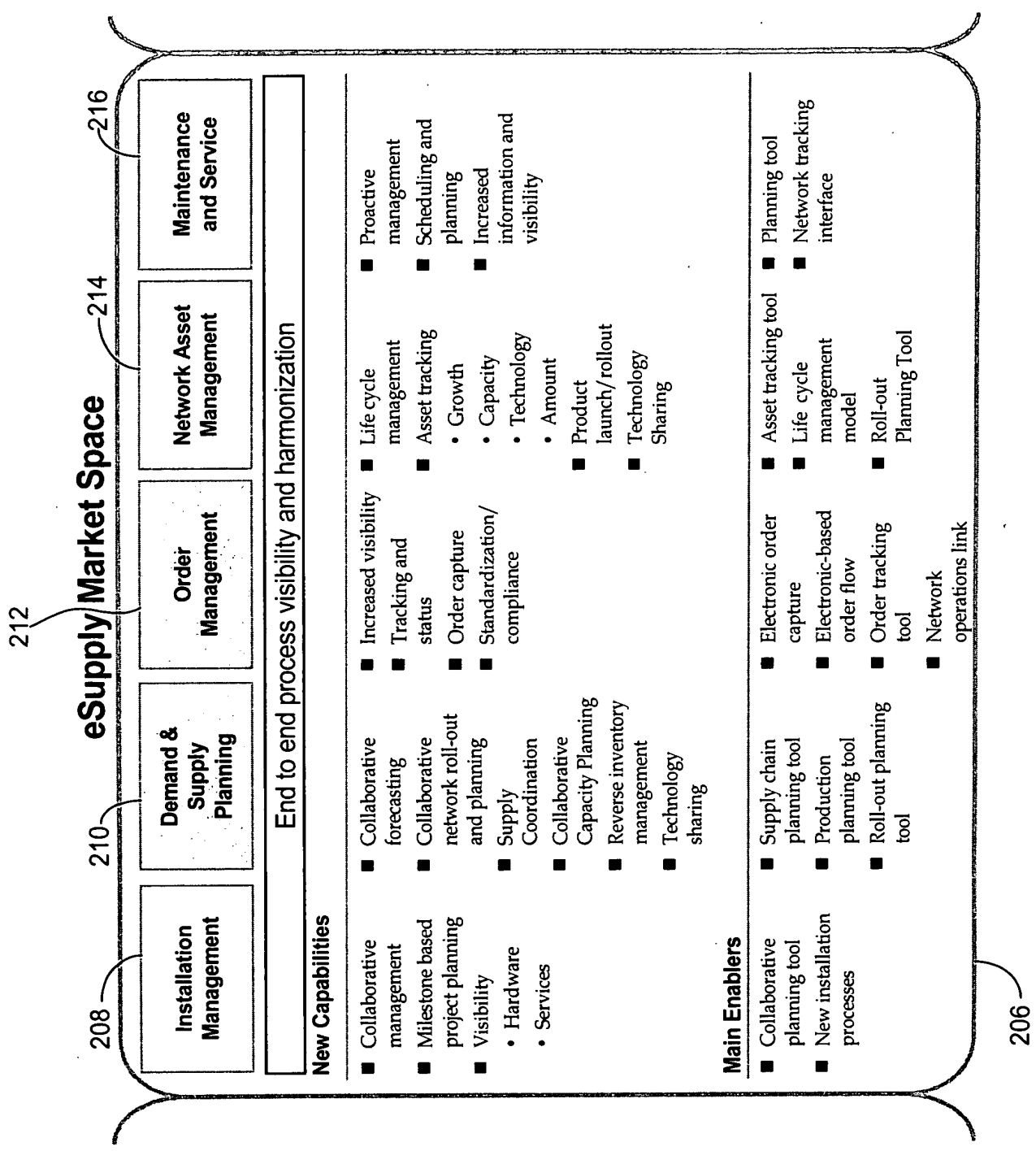


Figure 6

700

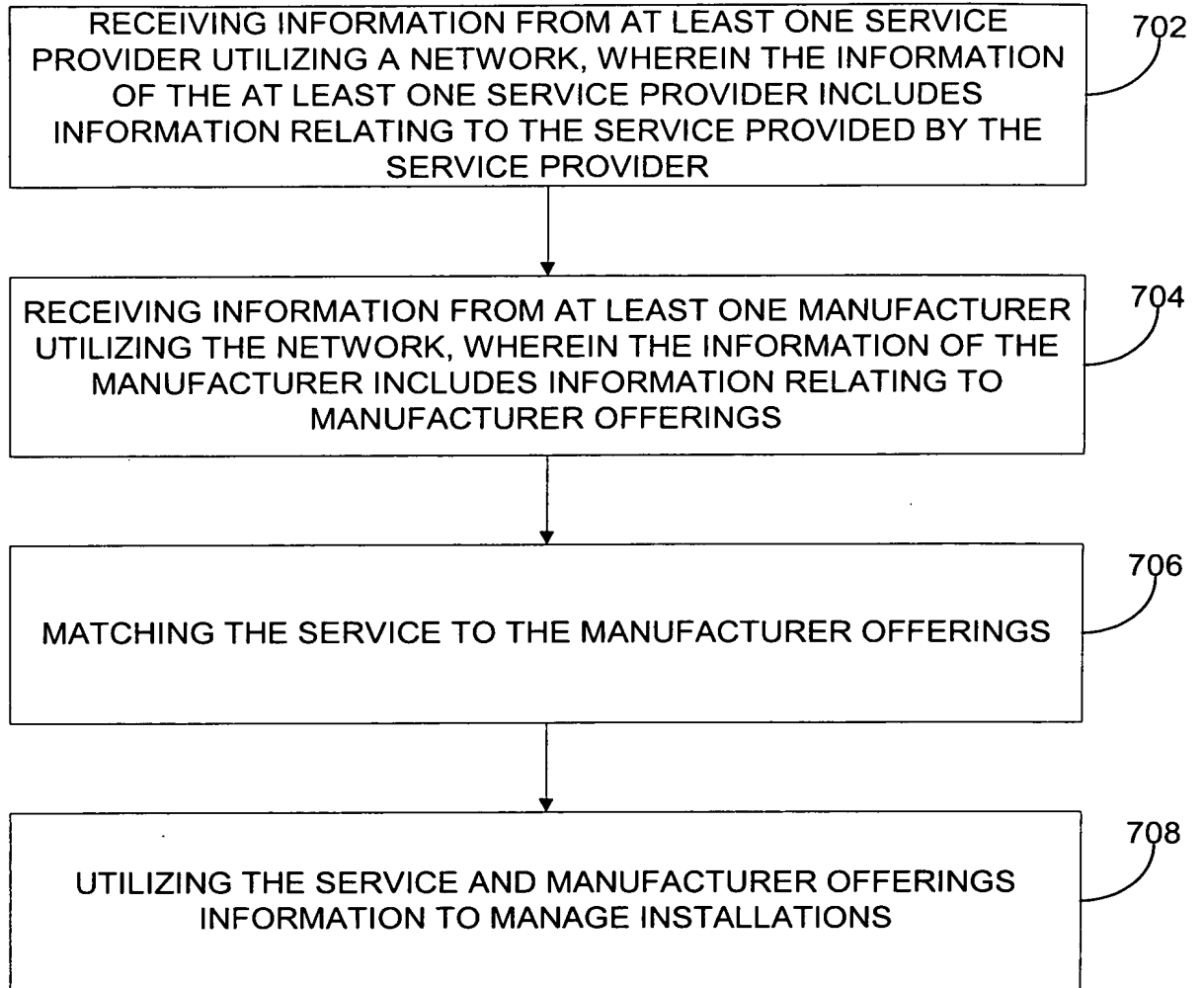


Figure 7

800

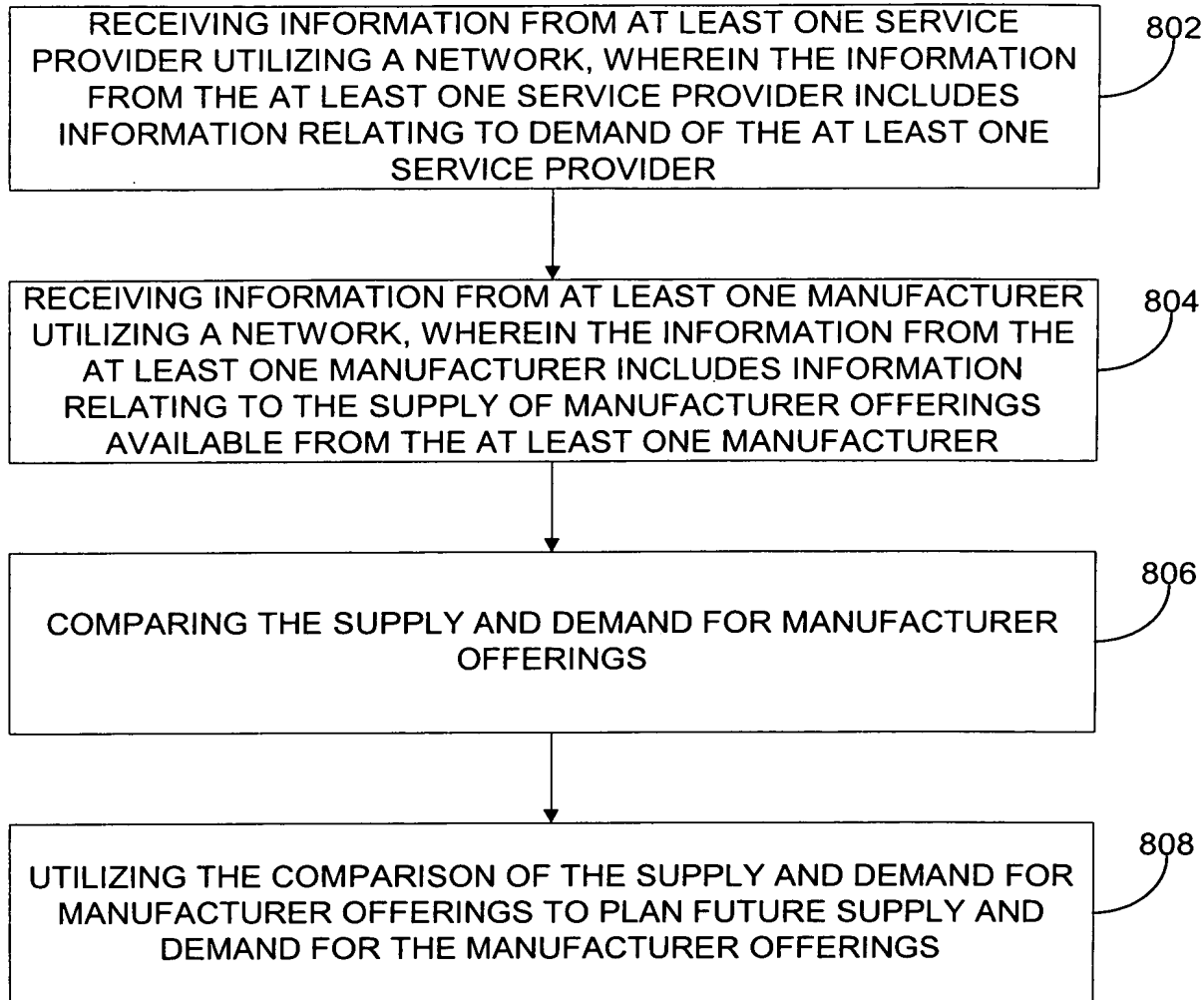


Figure 8

900

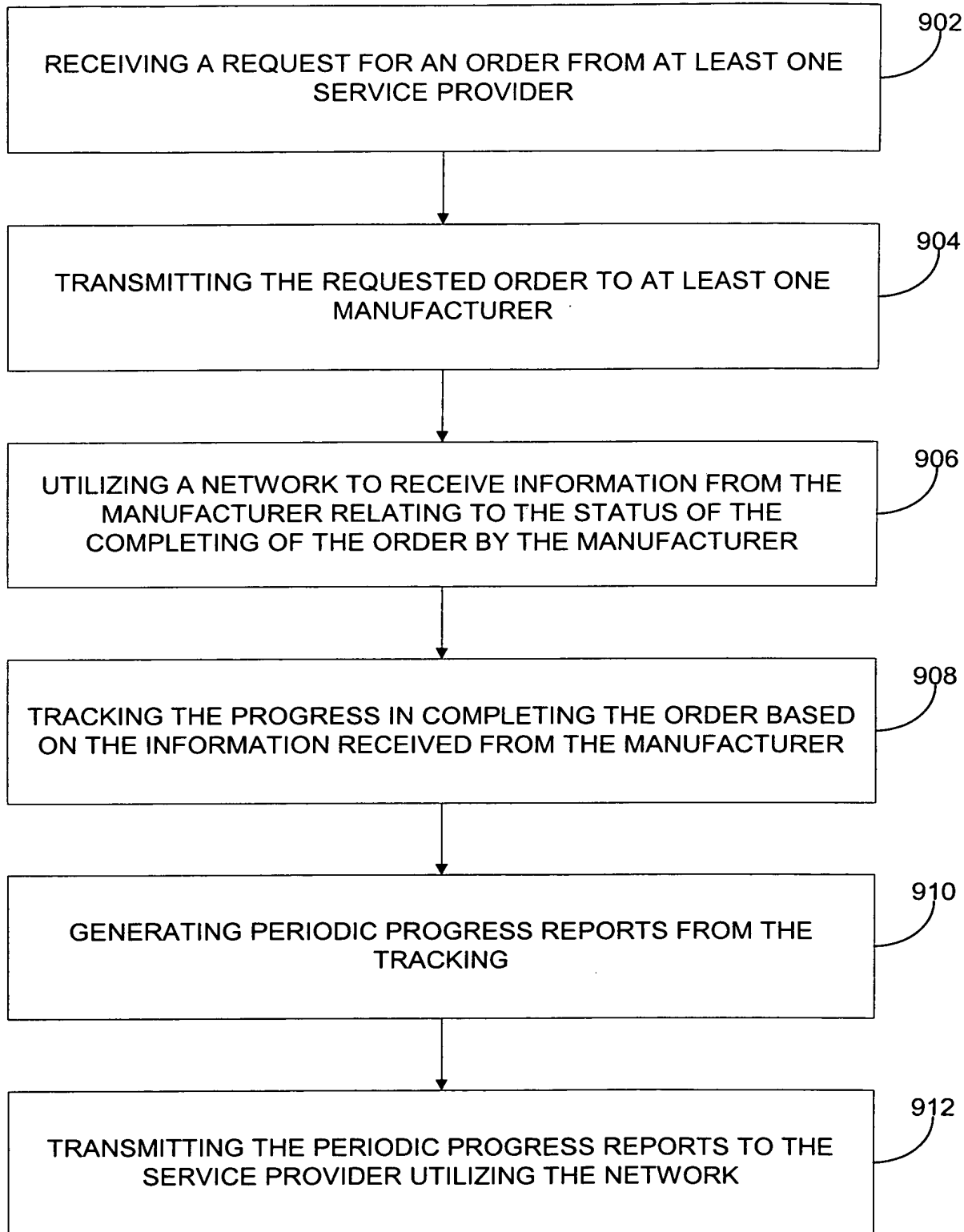


Figure 9

1000

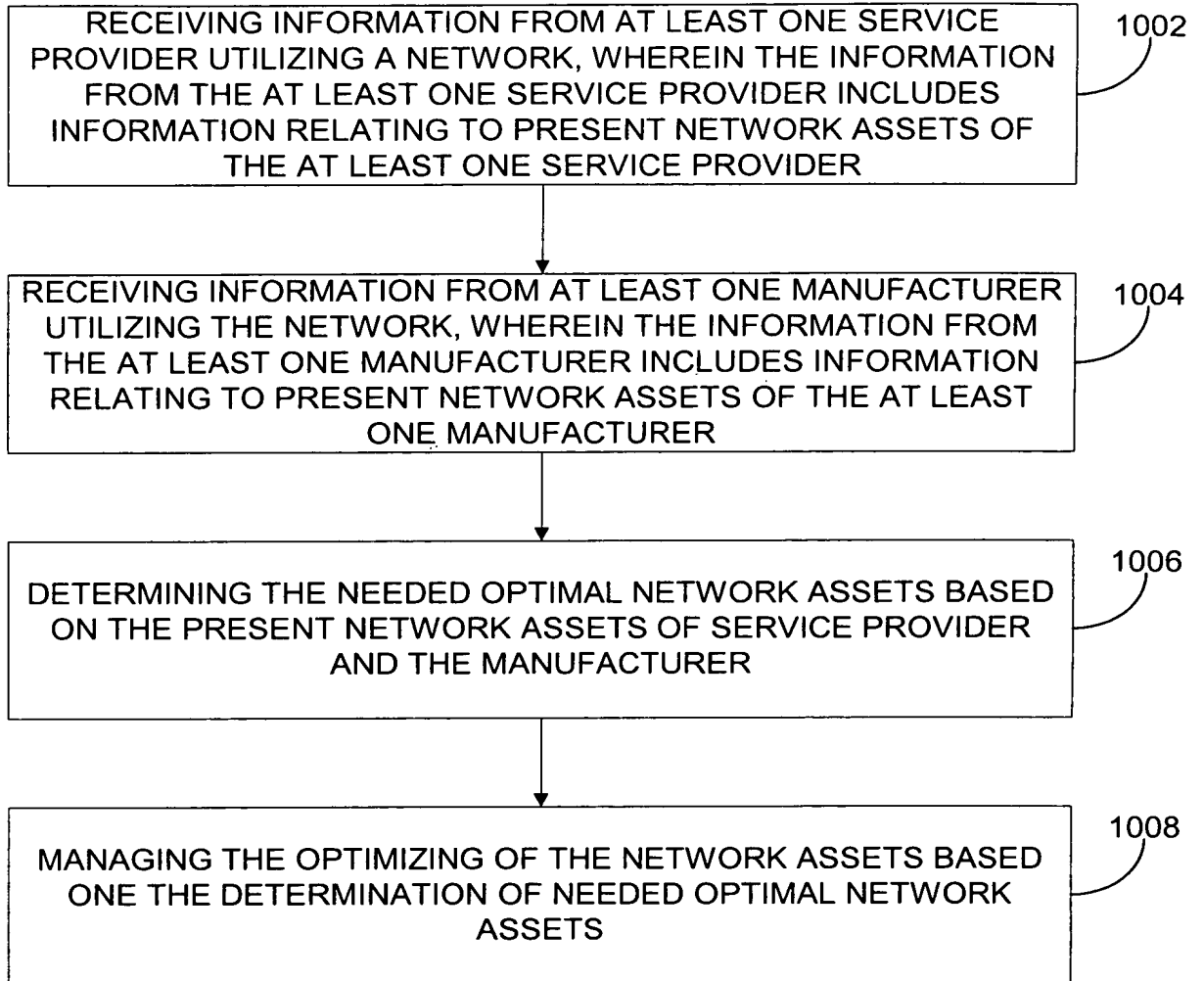


Figure 10

1100

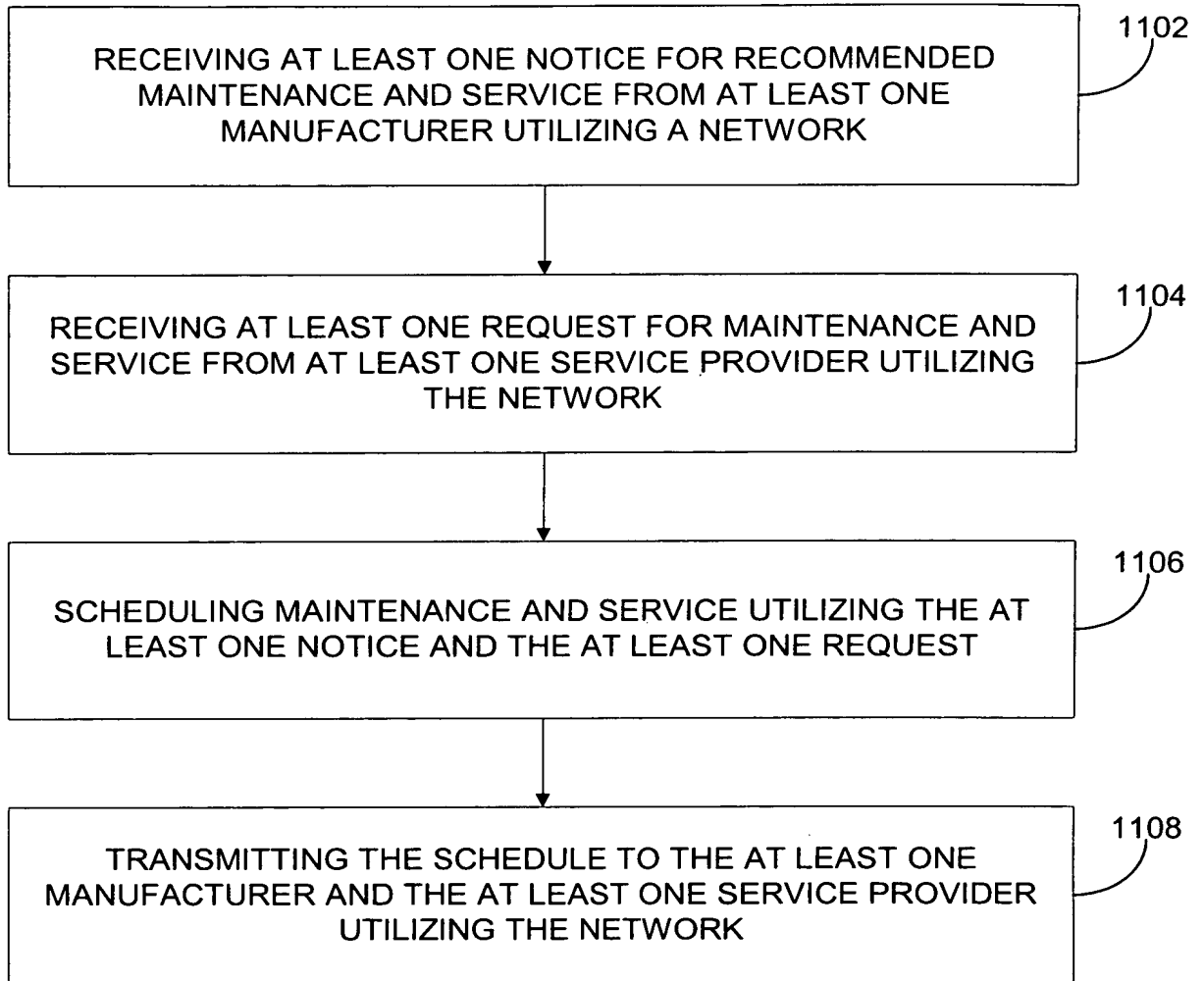


Figure 11

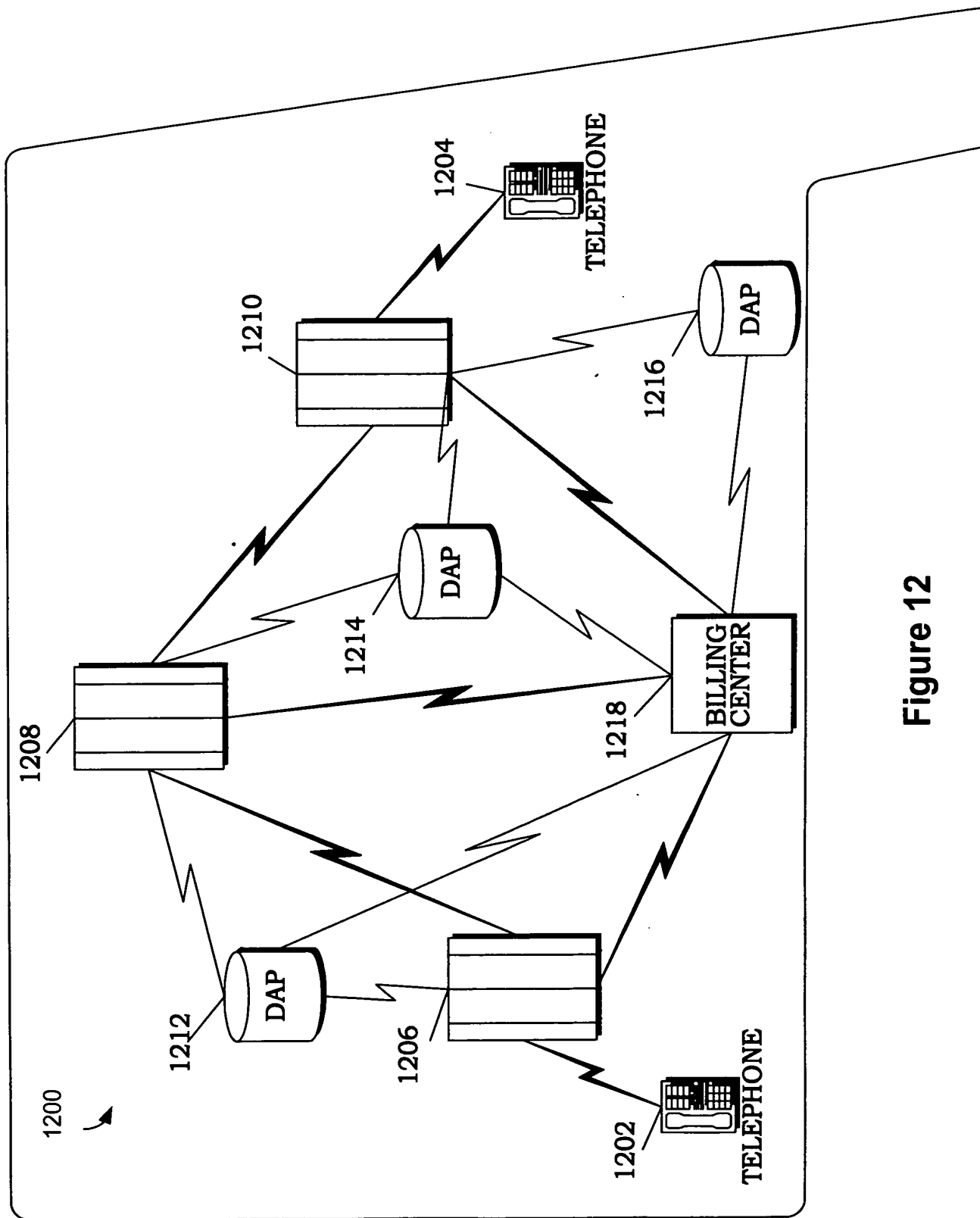


Figure 12

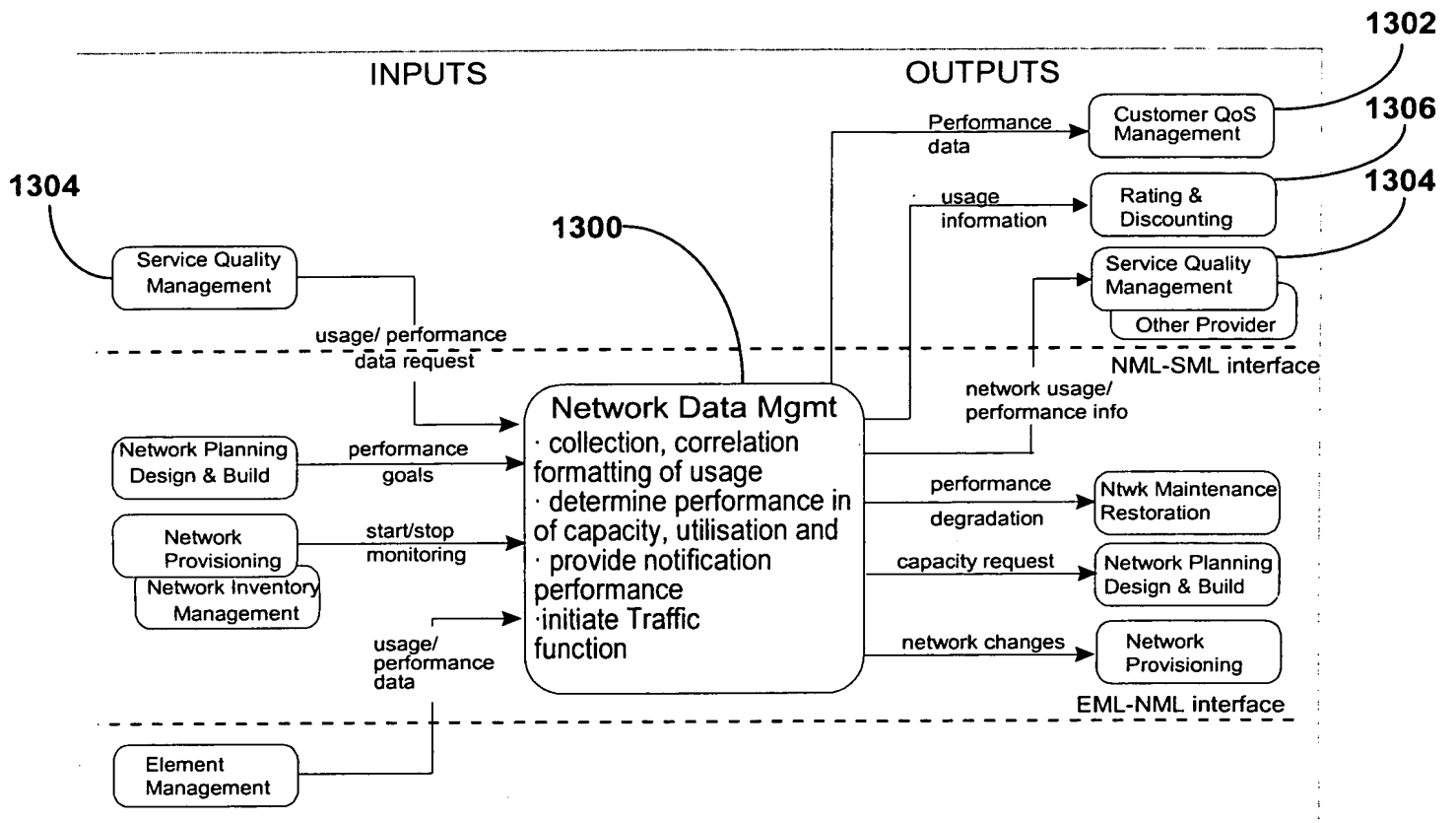


Figure 13

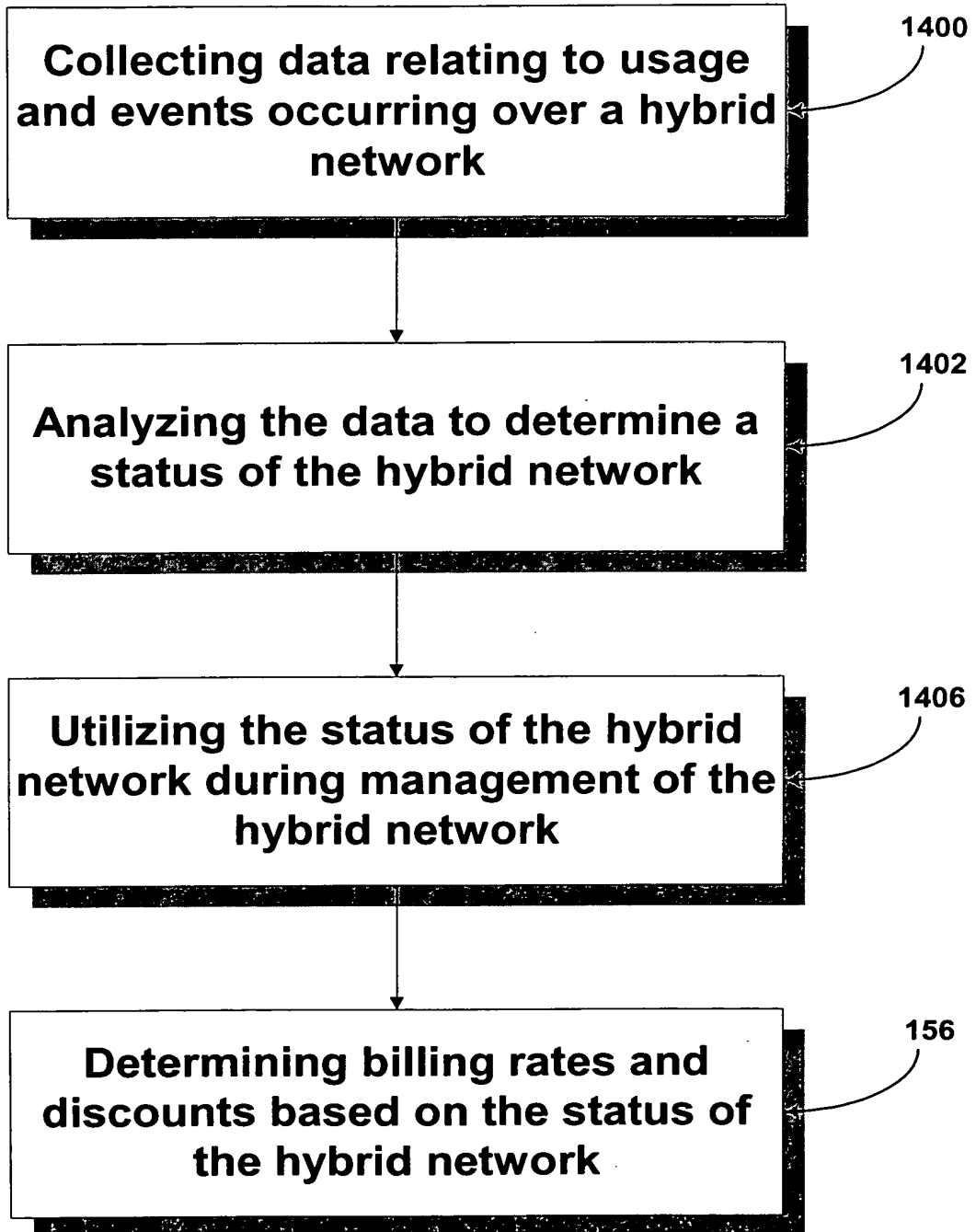


Figure 14

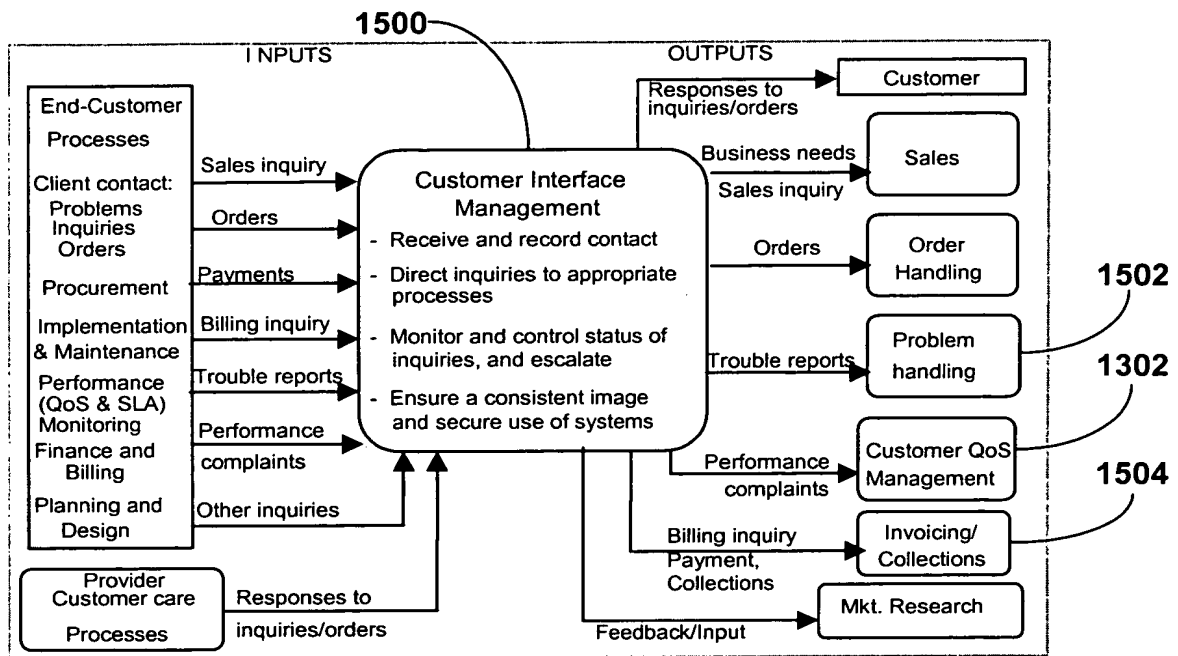


Figure 15

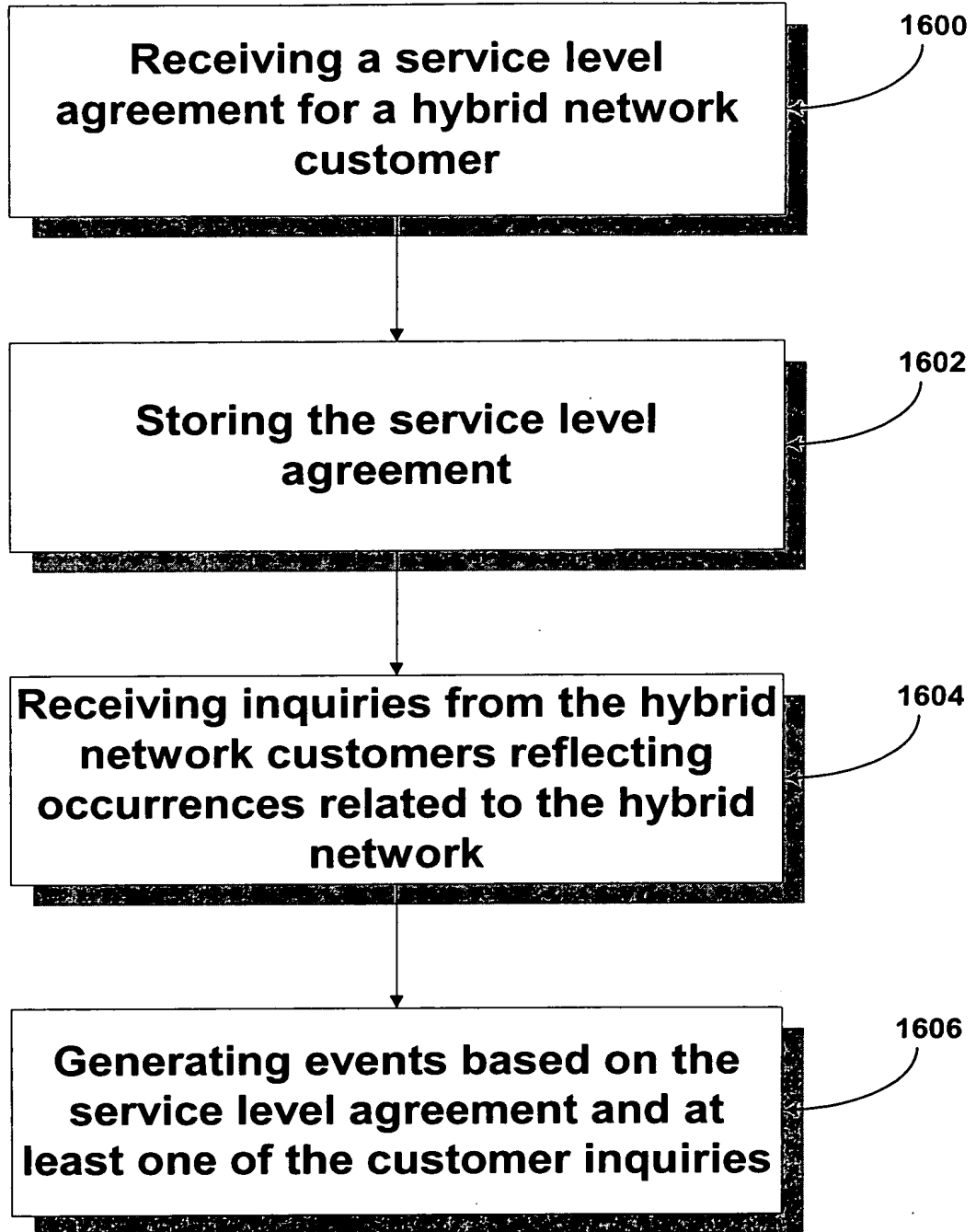


Figure 16

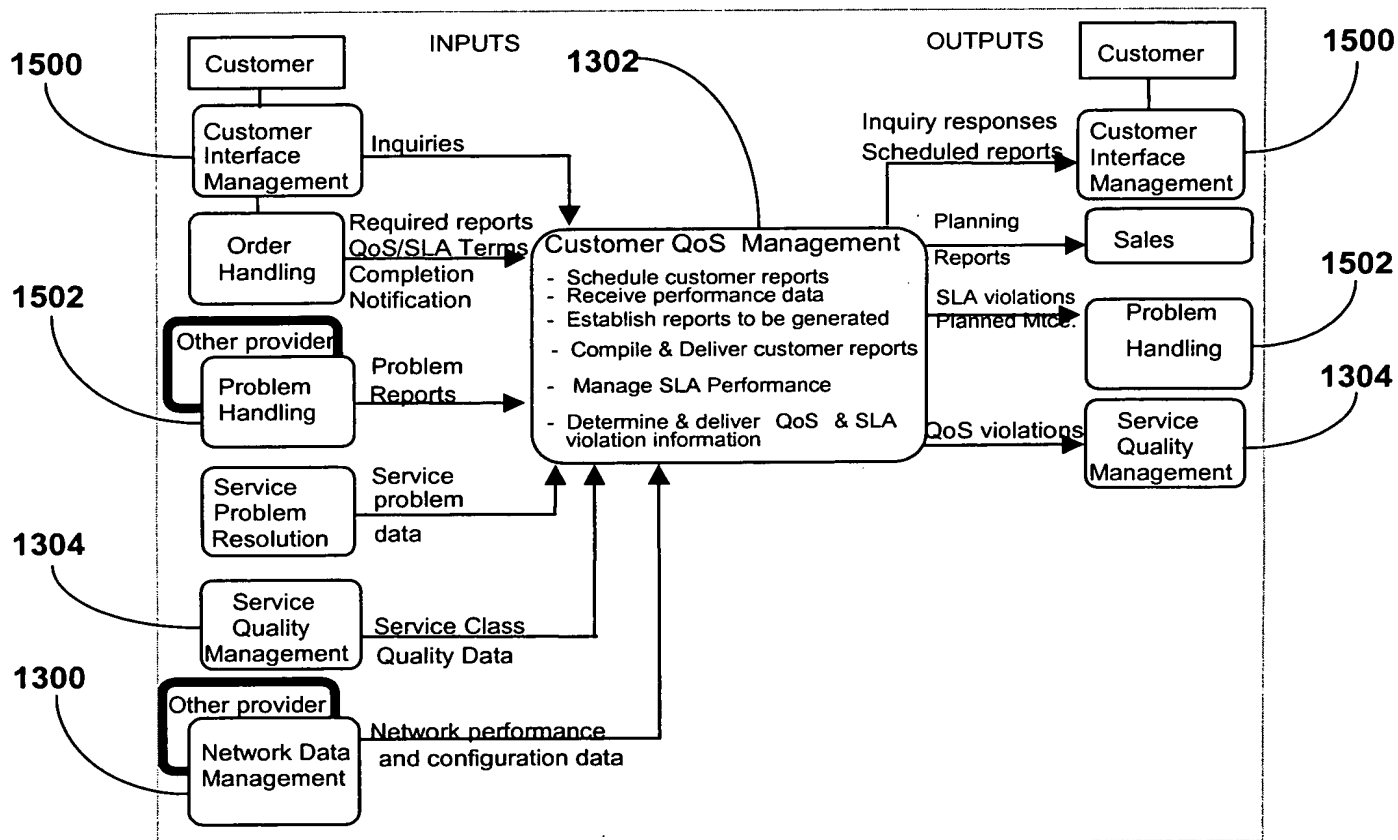


Figure 17

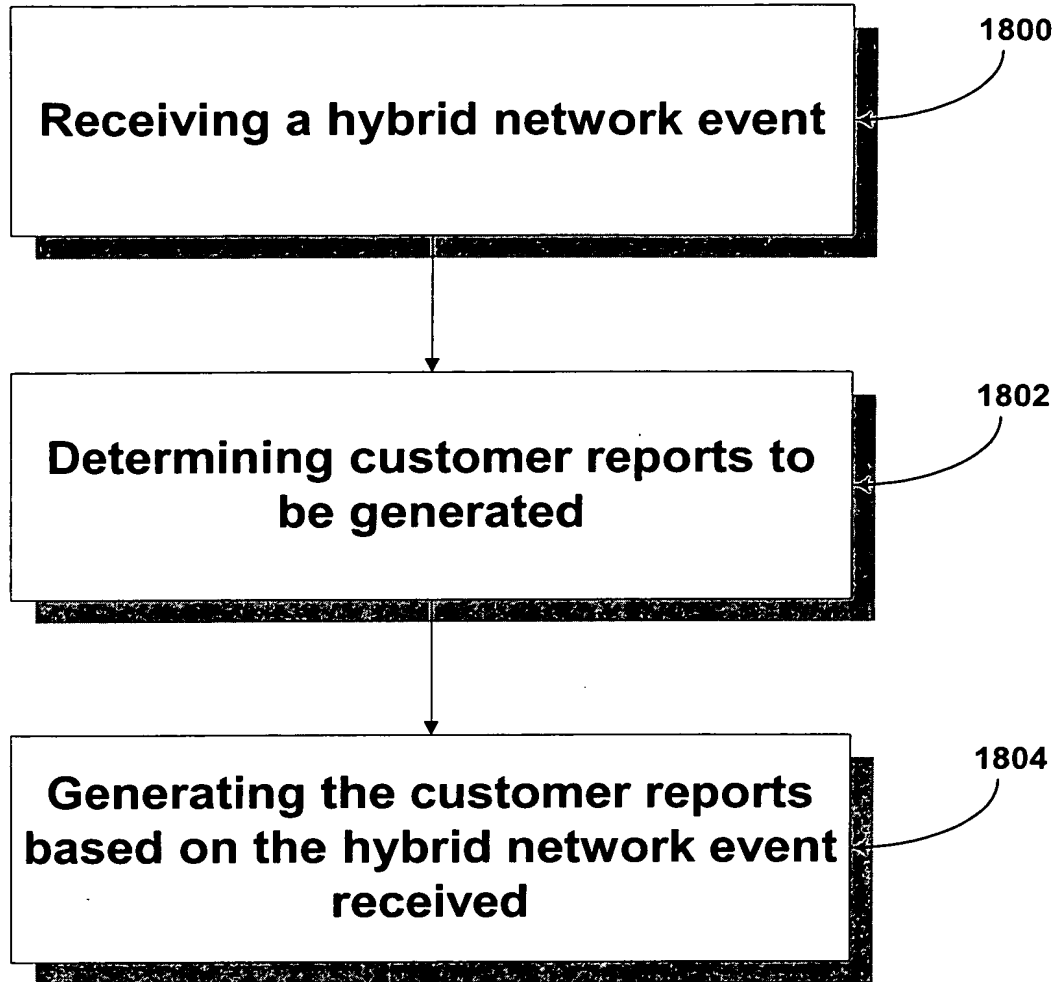


Figure 18

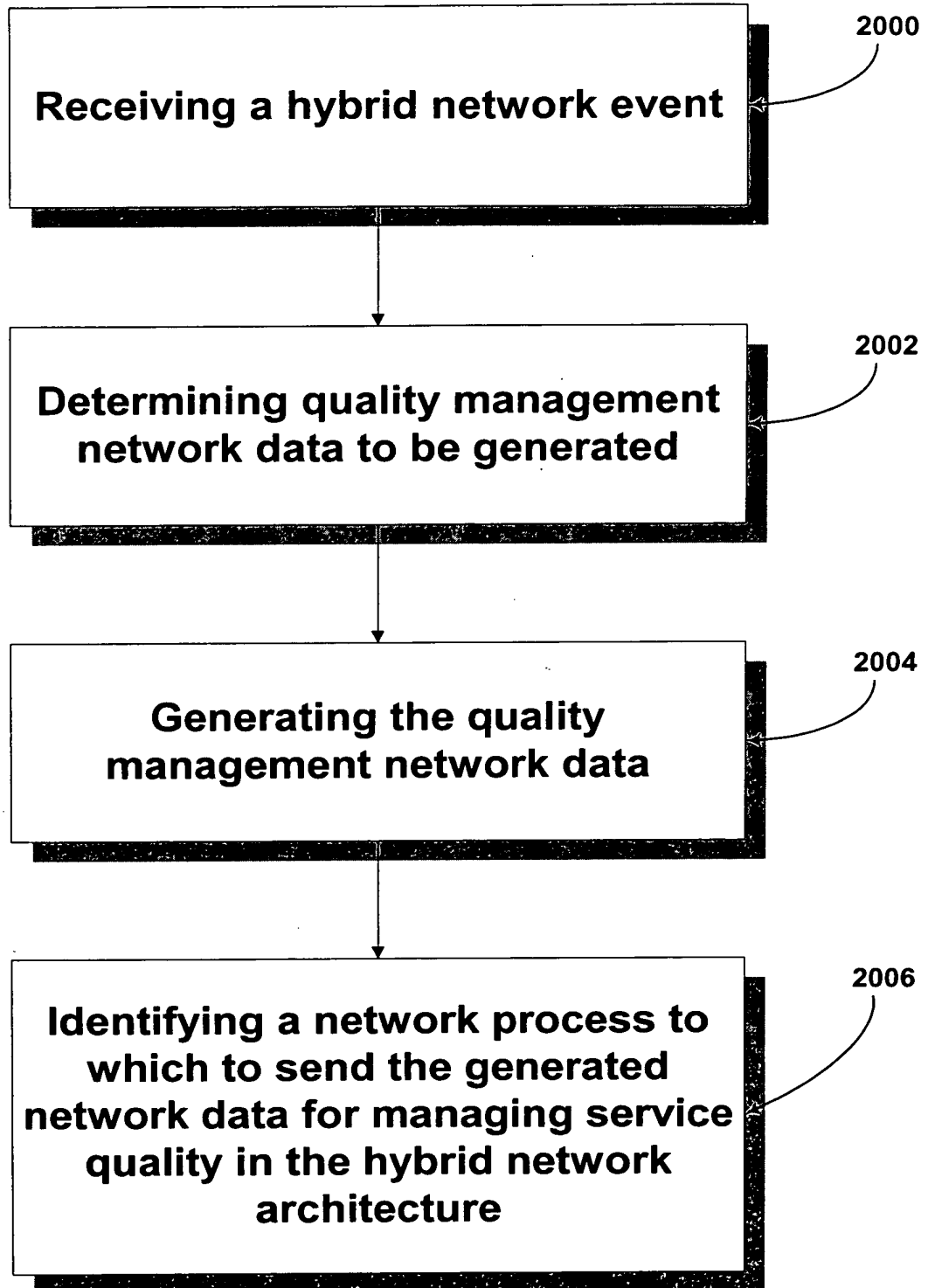


Figure 20

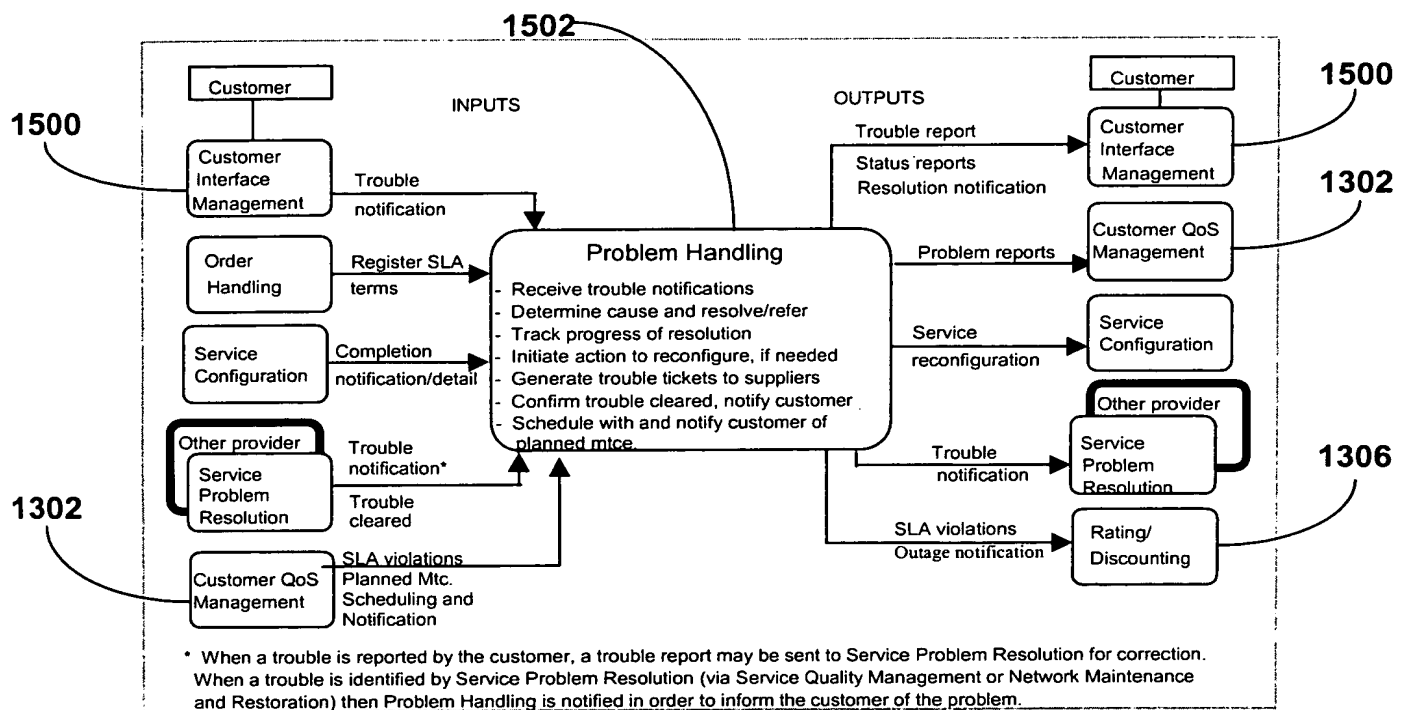


Figure 21

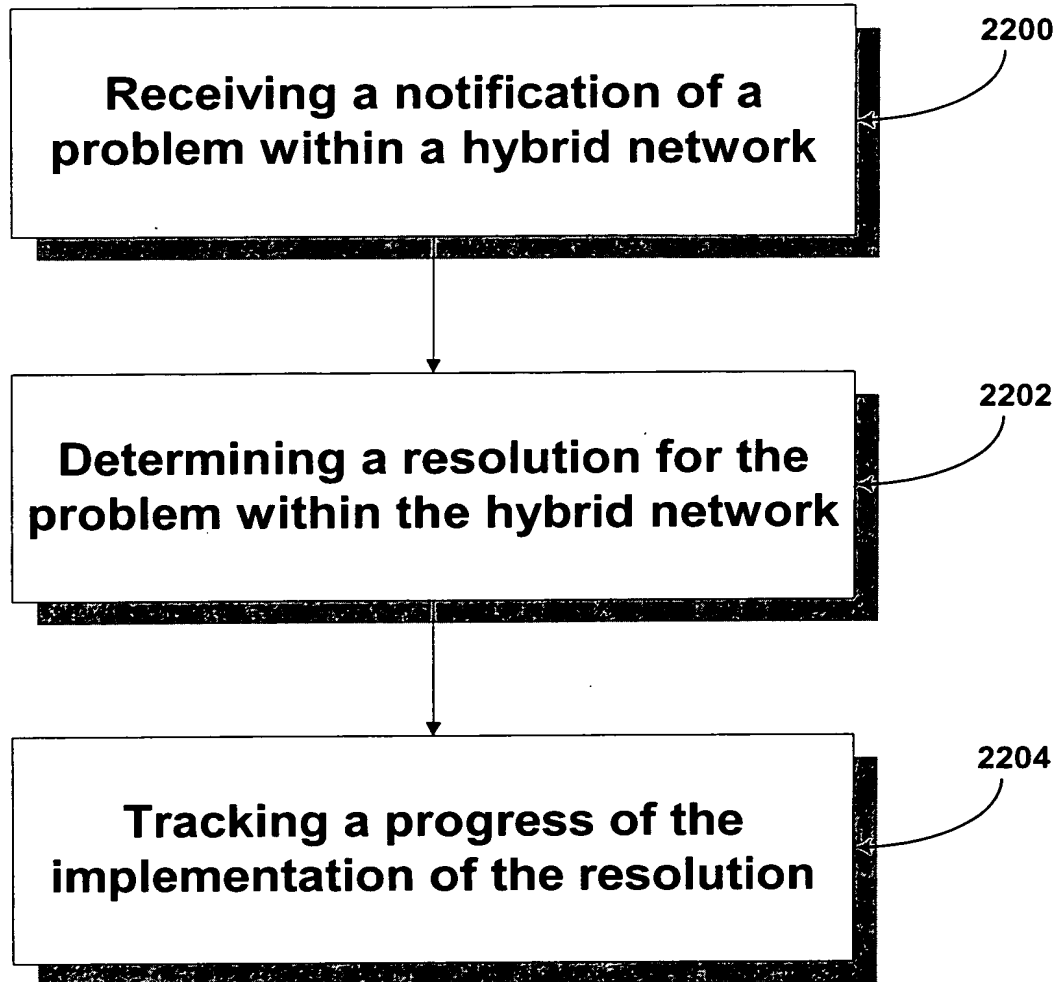


Figure 22

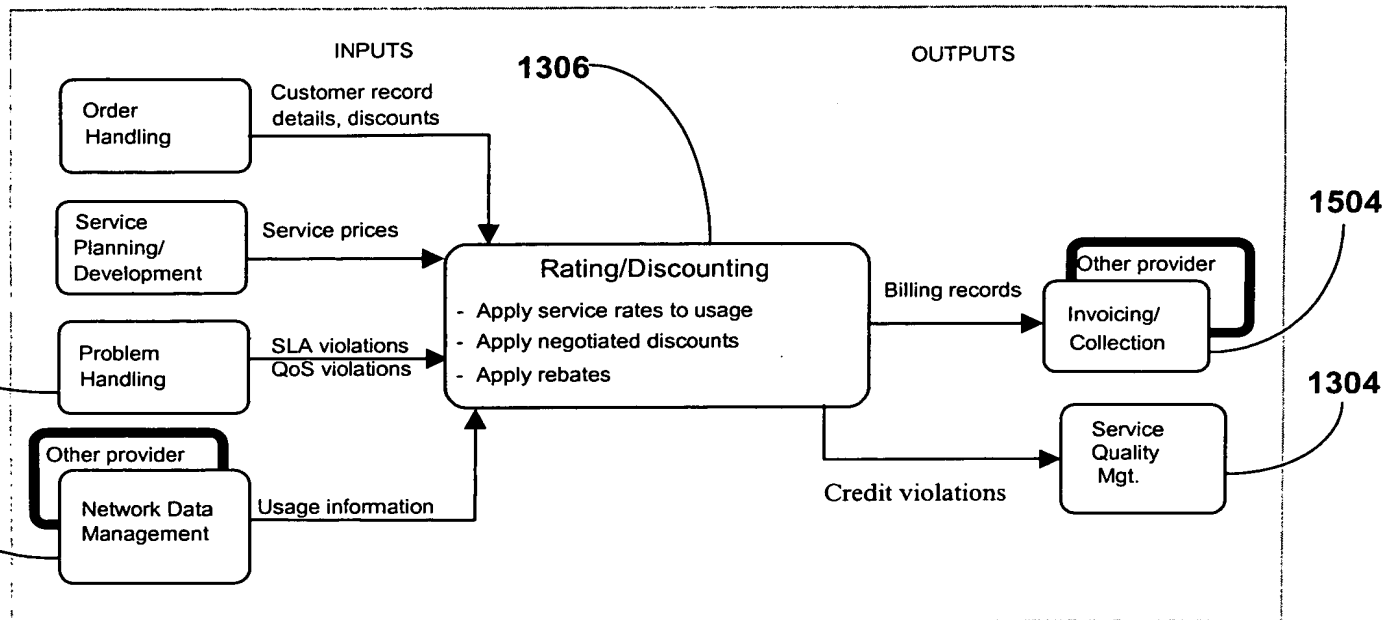


Figure 23

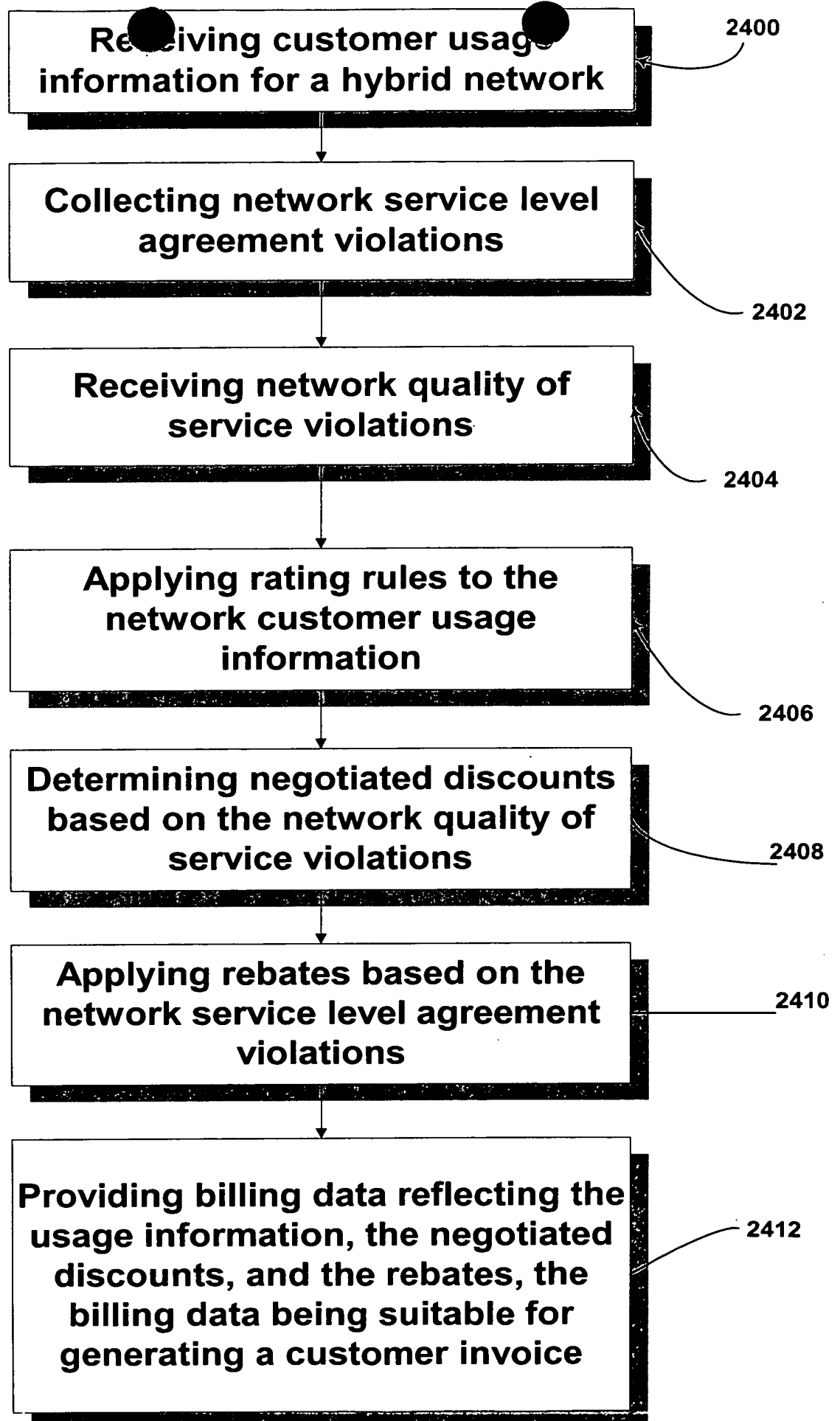


Figure 24

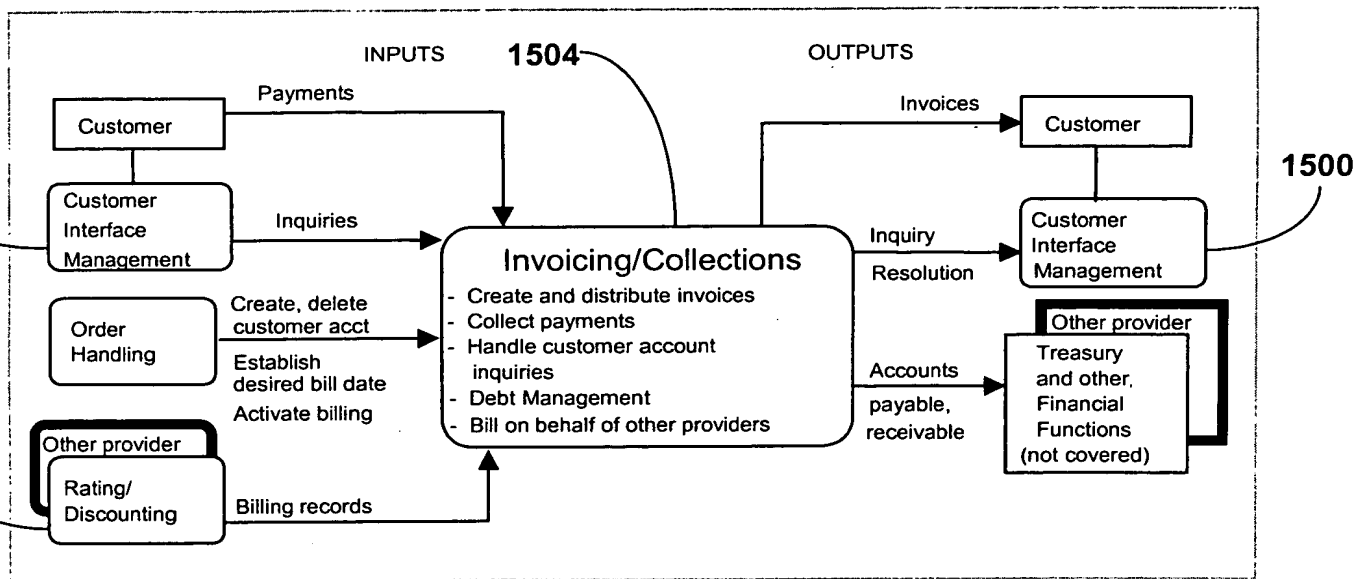


Figure 25

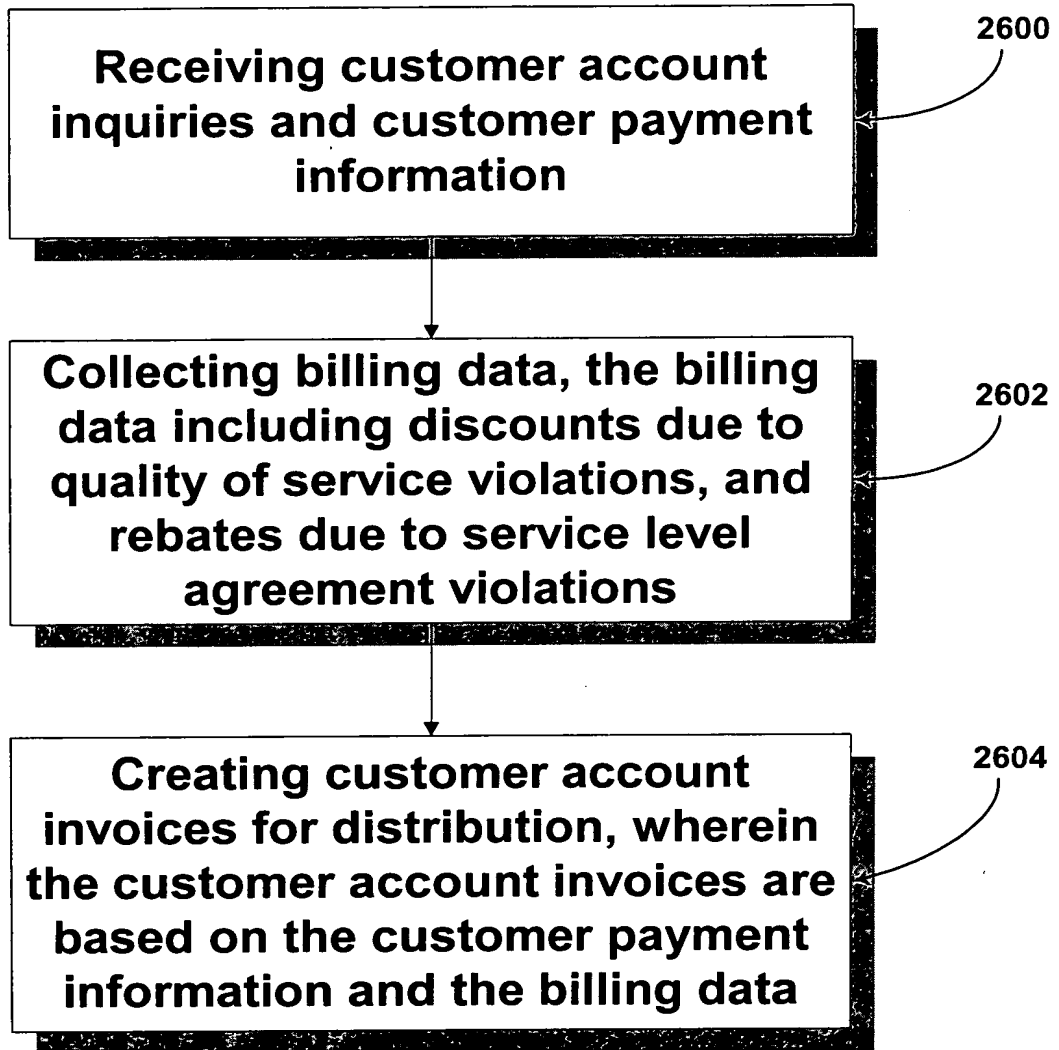


Figure 26

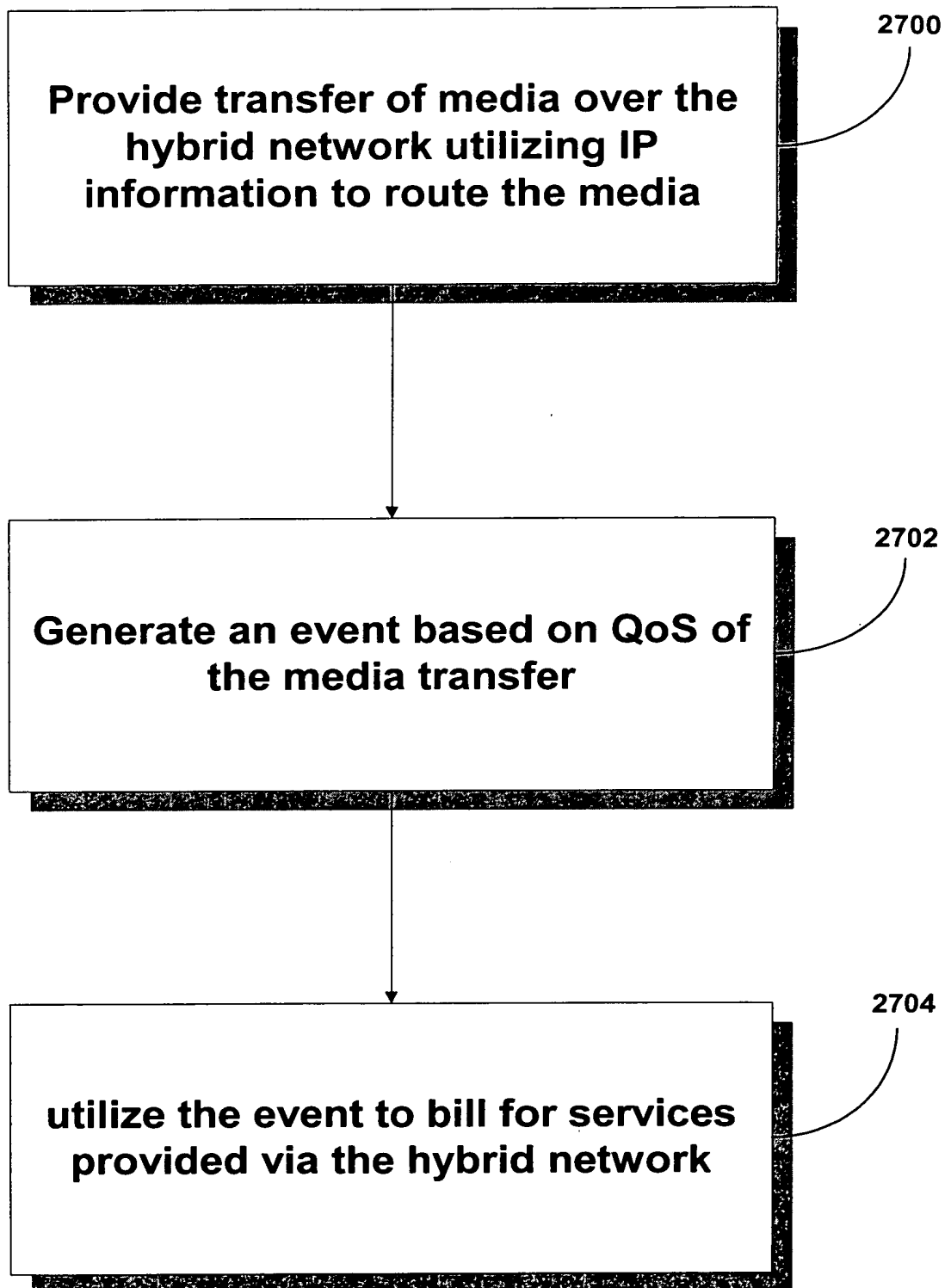


Figure 27

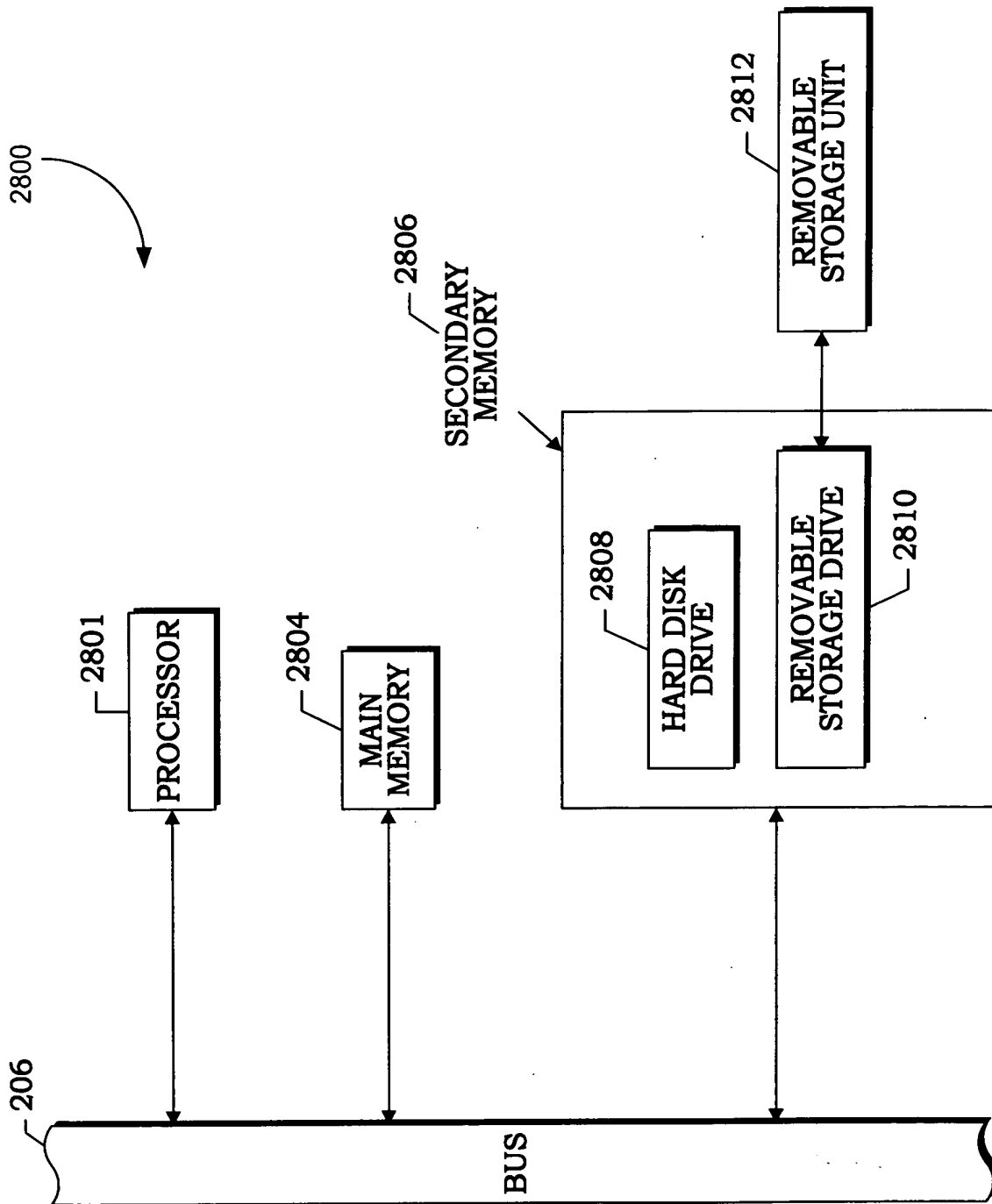


Figure 28

MSB																LSB																			
BITS		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	BITS		16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
WORD	00	CR ID								CD ID																									
	01	TP1 BITS 0-15																																	
	02	TP1 BITS 16-31																																	
	03	TP3 BITS 0-12														TP6 0-2																			
	04	TP6 BITS 3-12											TP7 BITS 0-5																						
	05	TP7 BITS 6-21																																	
	06	OPL. ORIGINATING PORT 0-15																																	
	07	OP	TPL. TERMINATING PORT 0-14																																
	08	TP	OTG. ORIGINATING TRUNK GROUP																								TT								
	09	TERMINATING TRUNK GROUP (1-12)																		TP3Q															
	10	TP6Q	ACTION CODE								OTC								TTC																
	11	ID1				ID2				ANI INDEX																									
	12	CLI 1				CLI 2				CLI 3								CLI 4																	
	13	CLI 5				CLI 6				CLI 7								CLI 8																	
	14	CLI 9				CLI 10				A1								A2																	
	15	A3				A4				A5								A6																	
	16	A7				A8				A9								A10																	
	17	A11				A12				A13								A14																	
	18	A15				A16				A17								A18																	
	19	A19				A20				A21								A22																	
	20	D1				D2				D3								D4																	
	21	D5				D6				D7								D8																	
	22	D9				D10				D11								D12																	
	23	D13				D14				D15								D16																	
	24	D17				PTD1				PTD2								PTD3																	
	25	PTD4				PTD5				PTD6								PTD7																	
	26	PTD8				PTD9				PTD10																									
	27	FC				TMC				KAT								TP7Q																	
	28	EC, ENTRY CODE								PD				ND ID				DIVID																	
	29	D0		CC	IN		SC	CD	DE	DT			SA	NOCLI																					
	30	CN1				CN2				CN3								CN4																	
31	ACIF				SS7 RELEASE CODE								NCIDSEQ								NL	RS													
BIT		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	BIT		16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

Figure 29

MSB											LSB							
BITS 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15																		
WORD 00	CR ID						CD ID											
01	TP1 BITS 0-15																	
02	TP1 BITS 16-31																	
03	TP3 BITS 0-12												TP6 0-2					
04	TP6 BITS 3-12										TP7 BITS 0-5							
05	TP7 BITS 6-21																	
06	OPL. ORIGINATING PORT 0-15																	
07	OP	TPL. TERMINATING PORT 0-14																
08	TP	OTG. ORIGINATING TRUNK GROUP													TT			
09	TERMINATING TRUNK GROUP (1-12)												TP3Q					
10	TP6Q	ACTION CODE						OTC				TTC						
11	ID1				ID2				ANI INDEX									
12	CLI 1				CLI 2				CLI 3				CLI 4					
13	CLI 5				CLI 6				CLI 7				CLI 8					
14	CLI 9				CLI 10				CLI11				CLI12					
15	CLI13				CLI14				CLI15				A1					
16	A2				A3				A4				A5					
17	A6				A7				A8				A9					
18	A10				A11				A12				A13					
19	A14				A15				A16				A17					
20	A18				A19				A20				A21					
21	A22				A23				A24				A25					
22	A26				A27				A28				A29					
23	A30				A31				A32				A33					
24	A34				A35				A36				A37					
25	A38				A39				A40				A41					
26	A42				A43				A44				A45					
27	FC				TMC				KAT				TP7Q					
28	EC, ENTRY CODE								PD		ND ID				DIVID			
29	D0	MN	CC	IN		SC	CD	DE	DT			SA	NOCLI					
30	CN1				CN2				CN3				CN4					
31	ACIF				SS7 RELEASE CODE								NCIDSEQ				NL	RS
BIT 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15																		

Figure 30

MSB										LSB							
BITS		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
WORD	32																
	33																
	34	ID1				ID2				ID3				ID4			
	35	ID5				ID6				ID7				ID8			
	36	ID9				ID10				ID11				ID12			
	37	ID13				ID14				ID15				ID16			
	38	ID17				ID18				ID19				ID20			
	39	ID21				ID22				ID23				ID24			
	40	ID25				PTD1				PTD2				PTD3			
	41	PTD4				PTD5				PTD6				PTD7			
	42	PTD8				PTD9				PTD10				PTD11			
	43	PTD12				PTD13				PTD14				PTD15			
	44	EIR CALL TYPE								OVFAL						CB	
	45	OVFCL				DTA 1				DTA 2				DTA 3			
	46	DTA 4				DTA 5				DTA 6				DTA 7			
	47	DTA 8				DTA 9				DTA 10				DTA 11			
	48	DTA 12				DTA 13				DTA 14				DTA 15			
	49	OVFC						DTAC								NCID	
	50	NETWORK CALL IDENTIFIER (NCID)															
	51	NETWORK CALL IDENTIFIER (NCID)															
	52	NETWORK CALL IDENTIFIER (NCID)															
	53	NETWORK CALL IDENTIFIER (NCID)															
	54	NETWORK CALL IDENTIFIER (NCID)															
	55																
	56																
	57																
	58																
	59													OUS TYPE		OUIE	
	60	OUIE COUNT CONT.												OVFCS			
	61	ORIGINATING NX64 BITMAP (1-16)															
	62	ORIG NX64 BITMAP(17-24)								TERM NX64 BITMAP(17-24)							
	63	TERMINATING NX64 BITMAP(9-24)															
BIT		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15

Figure 31

MSB																LSB		
BITS 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15																		
WORD 00	CR ID								CD ID									
01	TP1 BITS 0-15																	
02	TP1 BITS 16-31																	
03	TP4 BITS 0-12													TP6 0-2				
04	TP6 BITS 3-12										TP7 BITS 0-5							
05	TP7 BITS 6-21																	
06	OPL. ORIGINATING PORT 0-15																	
07	OP	TPL. TERMINATING PORT 0-14																
08	TP	OTG. ORIGINATING TRUNK GROUP													TT			
09	TERMINAGING TRUNK GROUP (1-12)												TP3Q					
10	TP6Q	ACTION CODE						OTC				TTC						
11	ID1				ID2				ONACC				TNACC					
12	CLI 1				CLI 2				CLI 3				CLI 4					
13	CLI 5				CLI 6				CLI 7				CLI 8					
14	CLI 9				CLI 10				A1				A2					
15	A3				A4				A5				A6					
16	A7				A8				A9				A10					
17	A11				A12				A13				A14					
18	A15				A16				A17				A18					
19	A19				A20				A21				A22					
20	D1				D2				D3				D4					
21	D5				D6				D7				D8					
22	D9				D10				D11				D12					
23	D13				D14				D15				D16					
24	D17				OPIN													
25	OPIN	TPS BITS 0-12																
26	RN1				RN2				RN3				RN4					
27	FC				TMC				KAT				TP7Q					
28	EC, ENTRY CODE								PD			ND ID			DIVID			
29	D0	CC	IN	SC	CD	DE	DT	PP	XC	SA	NOCLI							
30	CN1				CN2				CN3				CN4					
31	ACIF				SS7 RELEASE CODE								NCIDSEQ			NL	RS	
BITS 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15																		

Figure 32

MSB																LSB															
BITS																00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
WORD		00	CR ID										CD ID																		
		01	TP1 BITS 0-15																												
		02	TP1 BITS 16-31																												
		03	TP4 BITS 0-12												TP6 0-2																
		04	TP6 BITS 3-12										TP7 BITS 0-5																		
		05	TP7 BITS 6-21																												
		06	OPL. ORIGINATING PORT 0-15																												
		07	OP	TPL. TERMINATING PORT 0-14																											
		08	TP	OTG. ORIGINATING TRUNK GROUP												TT															
		09	TERMINAGING TRUNK GROUP (1-12)												TP3Q																
		10	TP6Q	ACTION CODE						OTC				TTC																	
		11	ID1				ID2				ONACC				TNACC																
		12	CLI 1				CLI 2				CLI 3				CLI 4																
		13	CLI 5				CLI 6				CLI 7				CLI 8																
		14	CLI 9				CLI 10				CLI 11				CLI 12																
		15	CLI 13				CLI 14				CLI 15				A1																
		16	A2				A3				A4				A5																
		17	A6				A7				A8				A9																
		18	A10				A11				A12				A13																
		19	A14				A15				A16				A17																
		20	A18				A19				A20				A21																
		21	A22				A23				A24				A25																
		22	A26				A27				A28				A29																
		23	A30				A31				A32				A33																
		24	A34				A35				A36				A37																
		25	A38				A39				A40				A41																
		26	A42				A43				A44				A45																
		27	FC				TNC				KAT				TF7Q																
		28	EC, ENTRY CODE								PD				ND ID				DIVID												
		29	DO	MM	CC	IN		SC	CD	DE	DT	PP	XC	SA	NOCLI																
		30	CN1				CN2				CN3				CN4																
		31	ACIF				SS7 RELEASE CODE								NCIDSEQ				NL	RS											
BITS																00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
EOSR/EOSR FORMAT																															

EOSR/EOSR FORMAT

Figure 33

MSB								LSB								
BITS	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
32	T&C GUEST 1							T&C GUEST 2								
33	T&C GUEST 3							T&C GUEST 4								
34	ID1			ID2				ID3			ID4					
35	ID5			ID6				ID7			ID8					
36	ID9			ID10				ID11			ID12					
37	ID13			ID14				ID15			ID16					
38	ID17			ID18				ID19			ID20					
39	ID21			ID22				ID23			ID24					
40	ID25			PTD1				PTD2			PTD3					
41	PTD4			PTD5				PTD6			PTD7					
42	PTD8			PTD9				PTD10			PTD11					
43	PTD12			PTD13				PTD14			PTD15					
44	EIR CALL TYPE							OVFAL							CB	
45	OVFCL			DTA 1				DTA 2			DTA 3					
46	DTA 4			DTA 5				DTA 6			DTA 7					
47	DTA 8			DTA 9				DTA 10			DTA 11					
48	DTA 12			DTA 13				DTA 14			DTA 15					
49	OVFC						DTAC								NCID	
50	NETWORK CALL IDENTIFIER (NCID)															
51	NETWORK CALL IDENTIFIER (NCID)															
52	NETWORK CALL IDENTIFIER (NCID)															
53	NETWORK CALL IDENTIFIER (NCID)															
54	NETWORK CALL IDENTIFIER (NCID)															
55	T&C ROOM 1							T&C ROOM 2								
56	T&C ROOM 3							T&C ROOM 4								
57	T&C ROOM 5							T&C ROOM 6								
58	EAC1			EAC2				EAC3			EAC4					
59	EAC5			EAC6				EAC7			EAC8					
60	EAC9			EAC10				EAC11			EAC12					
61	OPIN													OVFCS		
62	TP5-OPERATOR RELEASE															
63	RN1			RN2				RN3			RN4					
BIT	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15

Figure 34

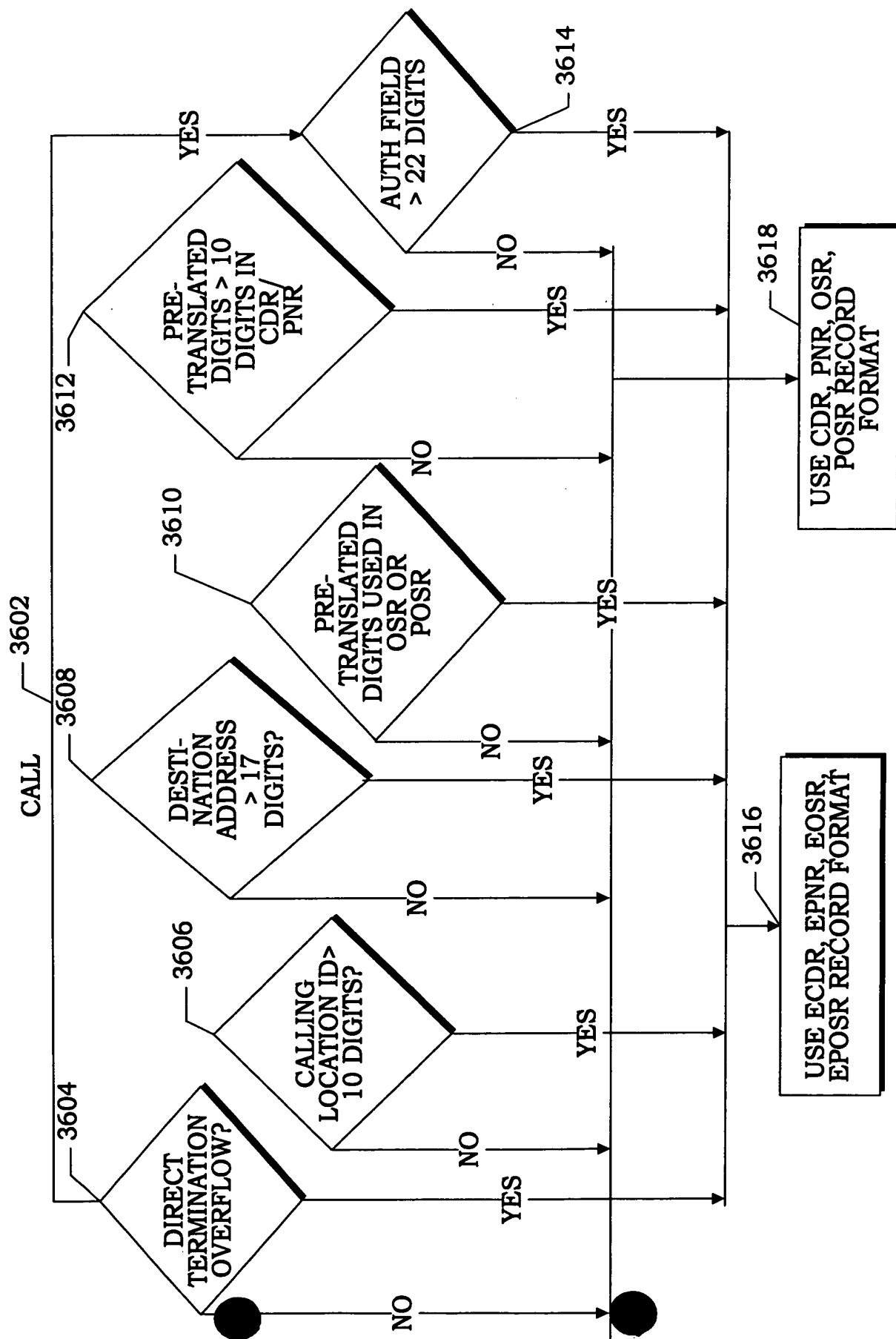


Figure 36

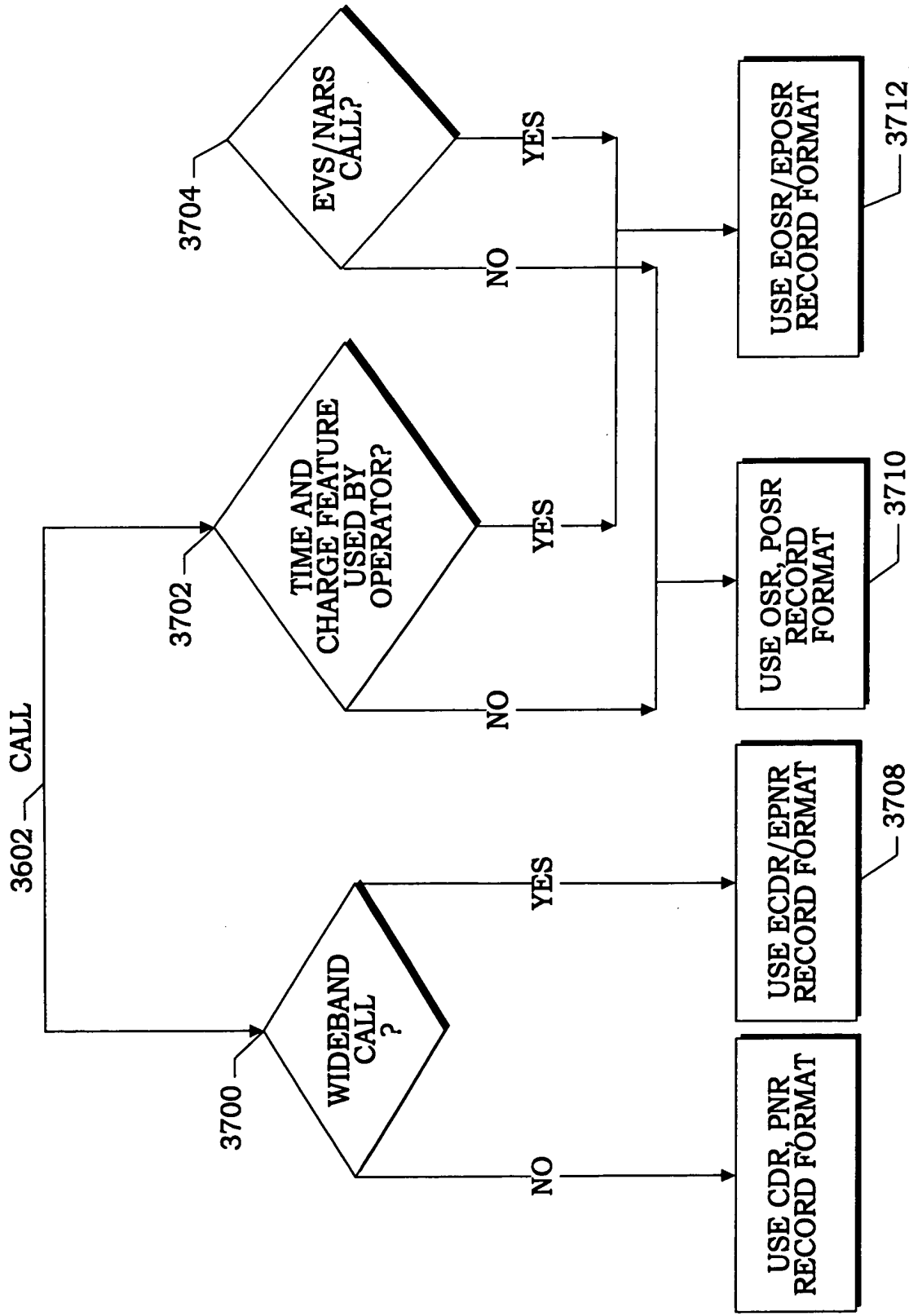


Figure 37

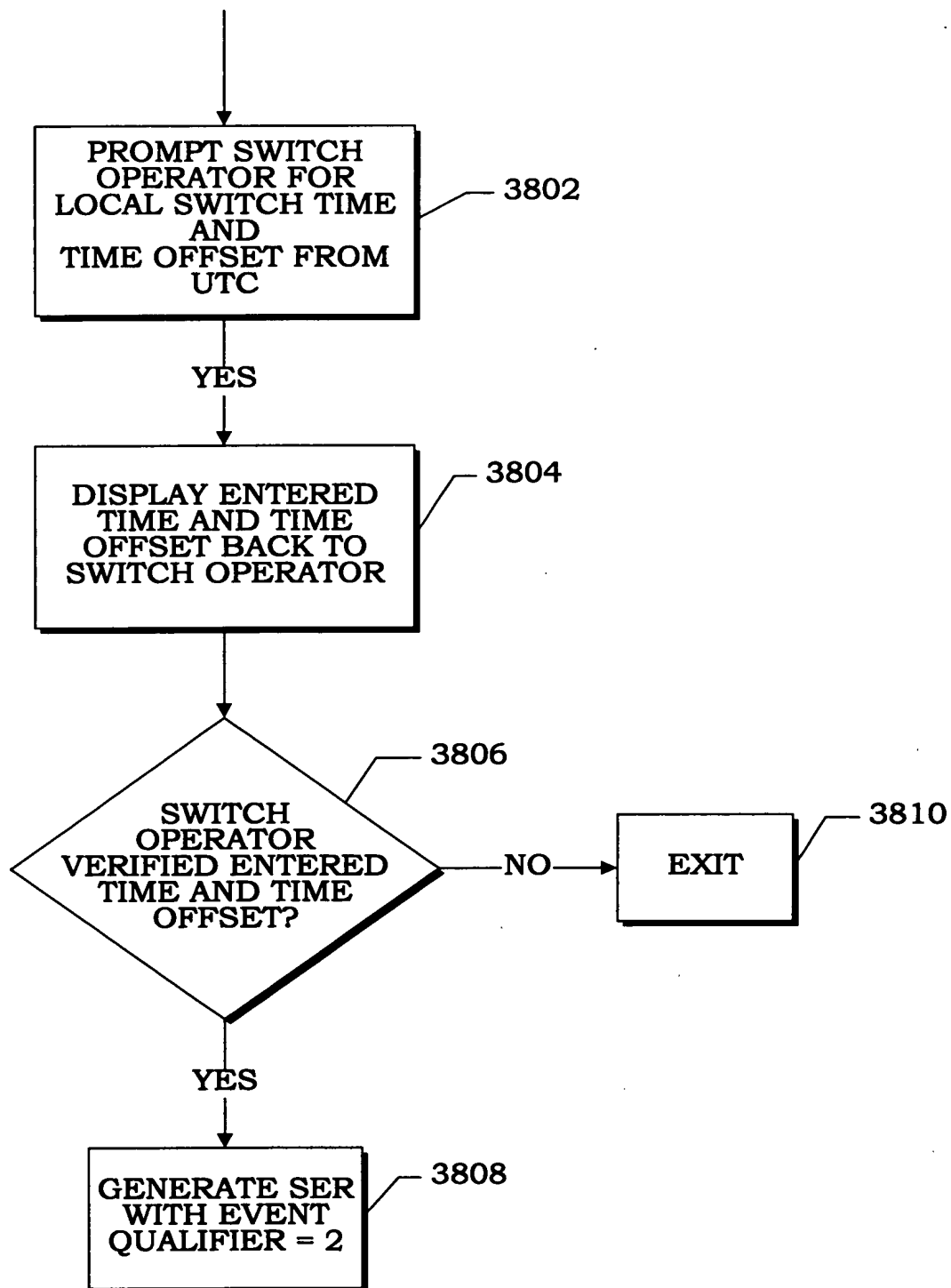


Figure 38

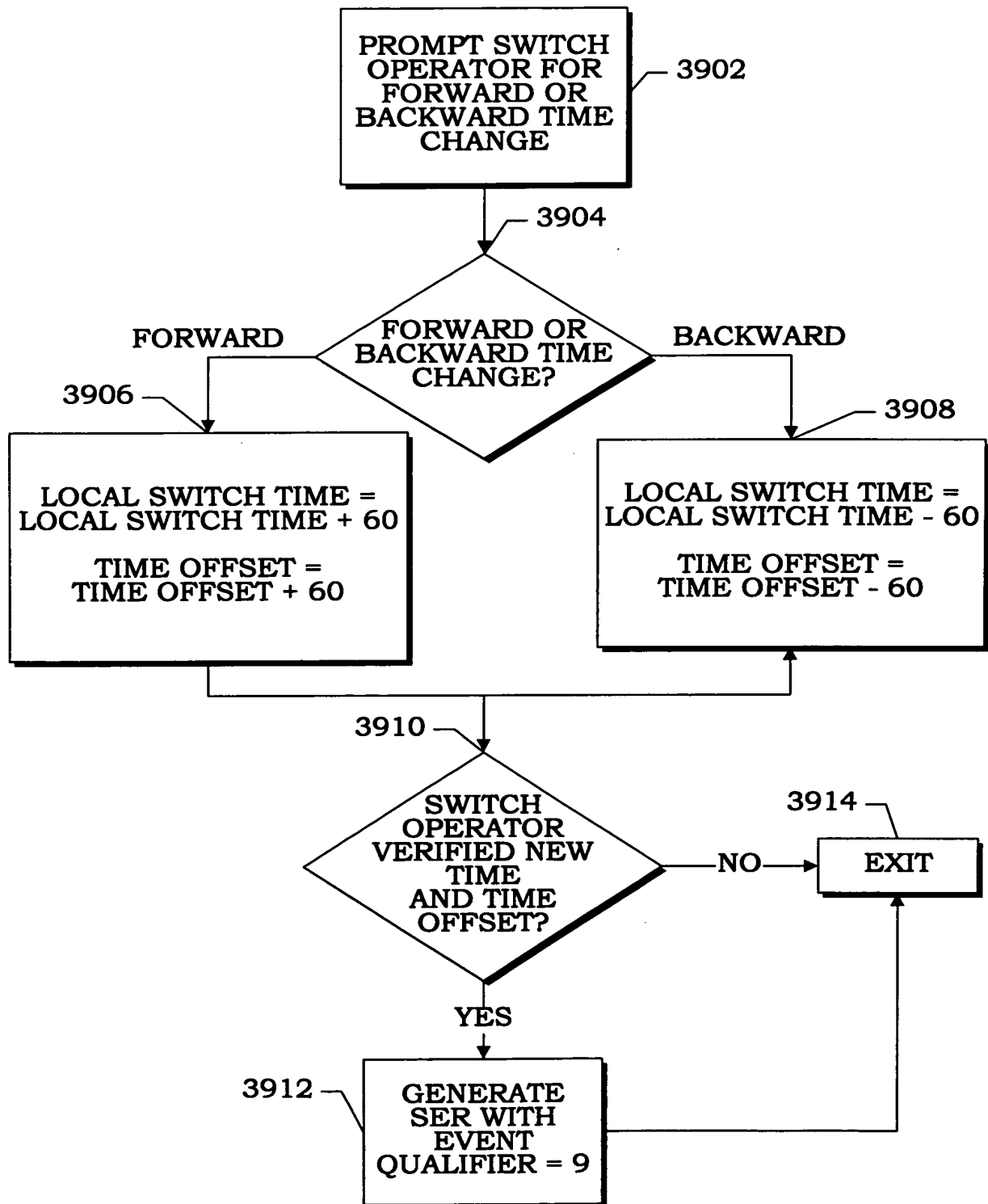


Figure 39

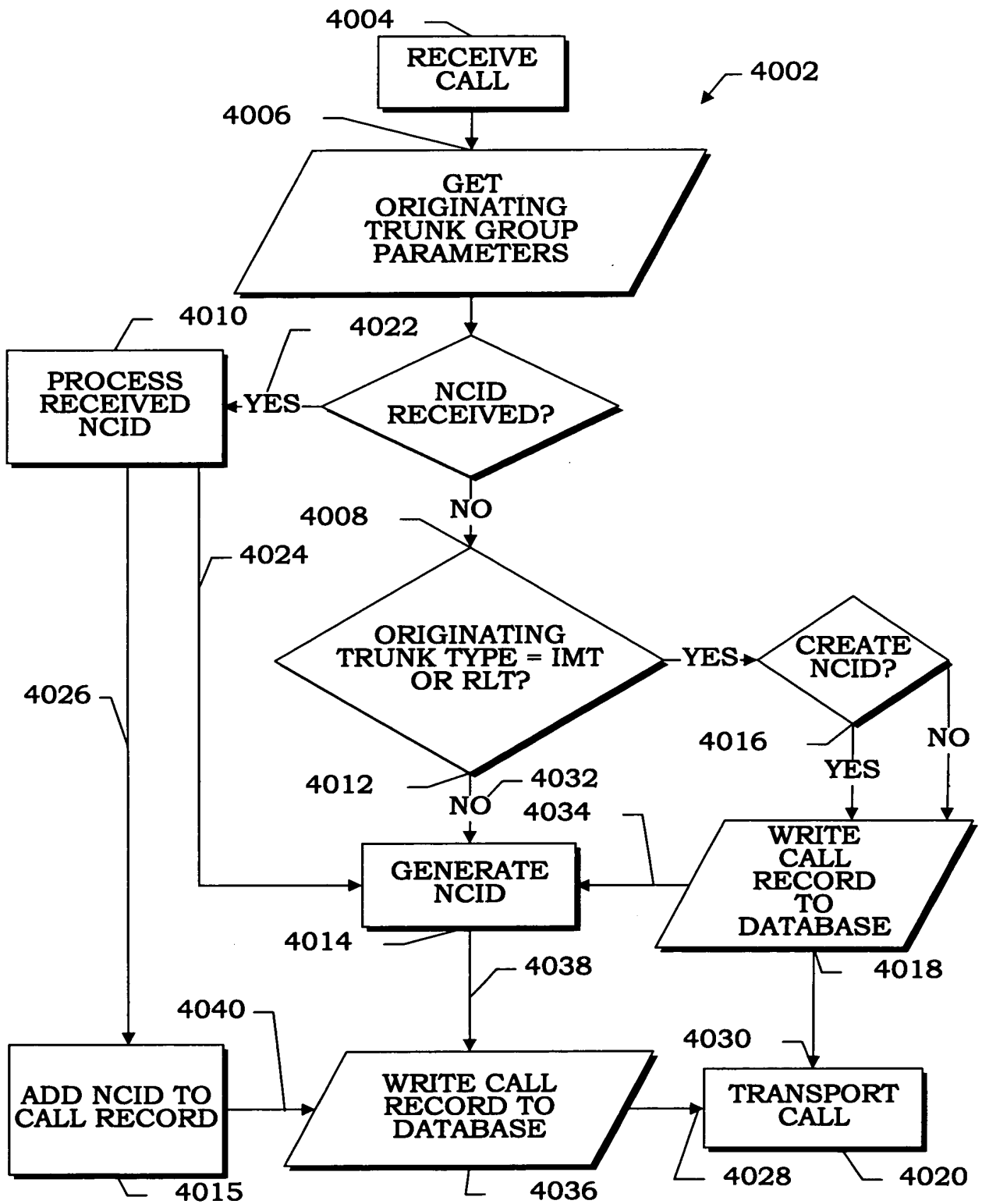


Figure 40

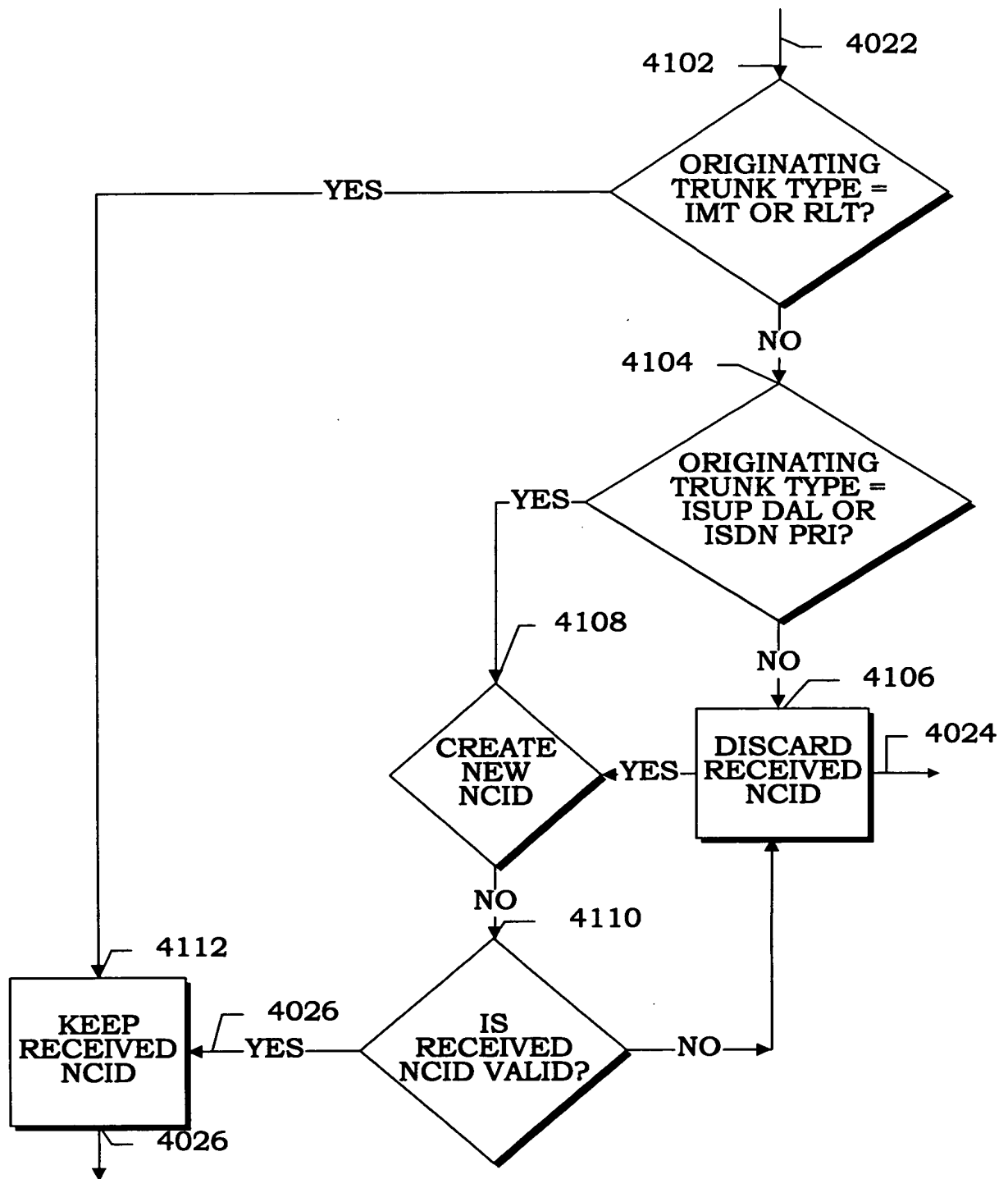


Figure 41

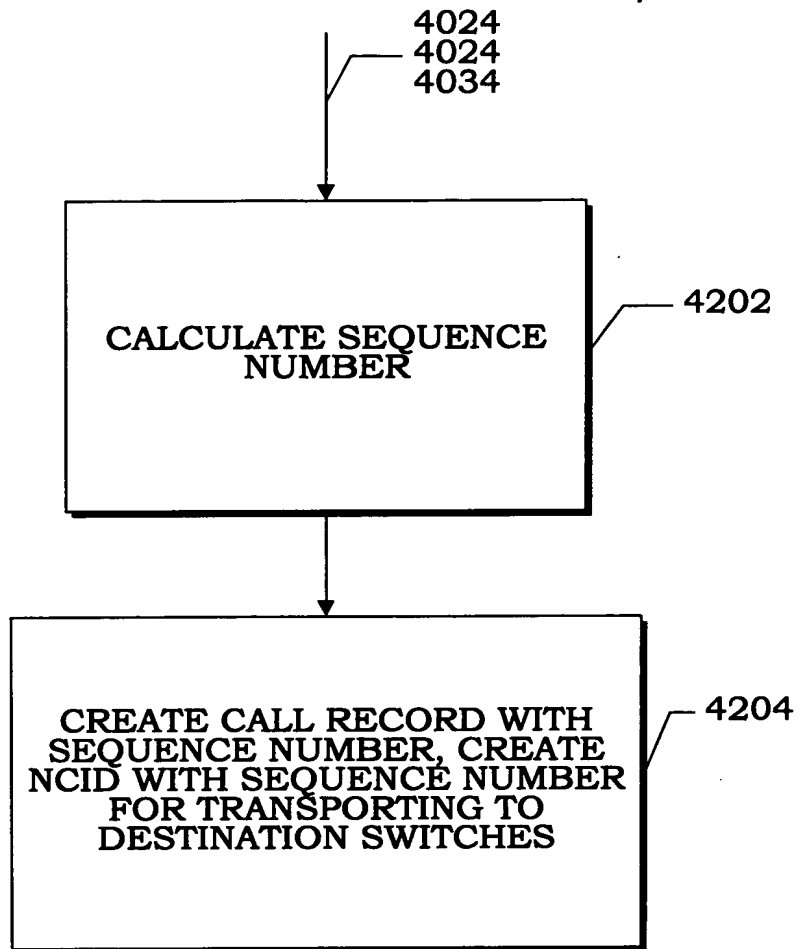


Figure 42

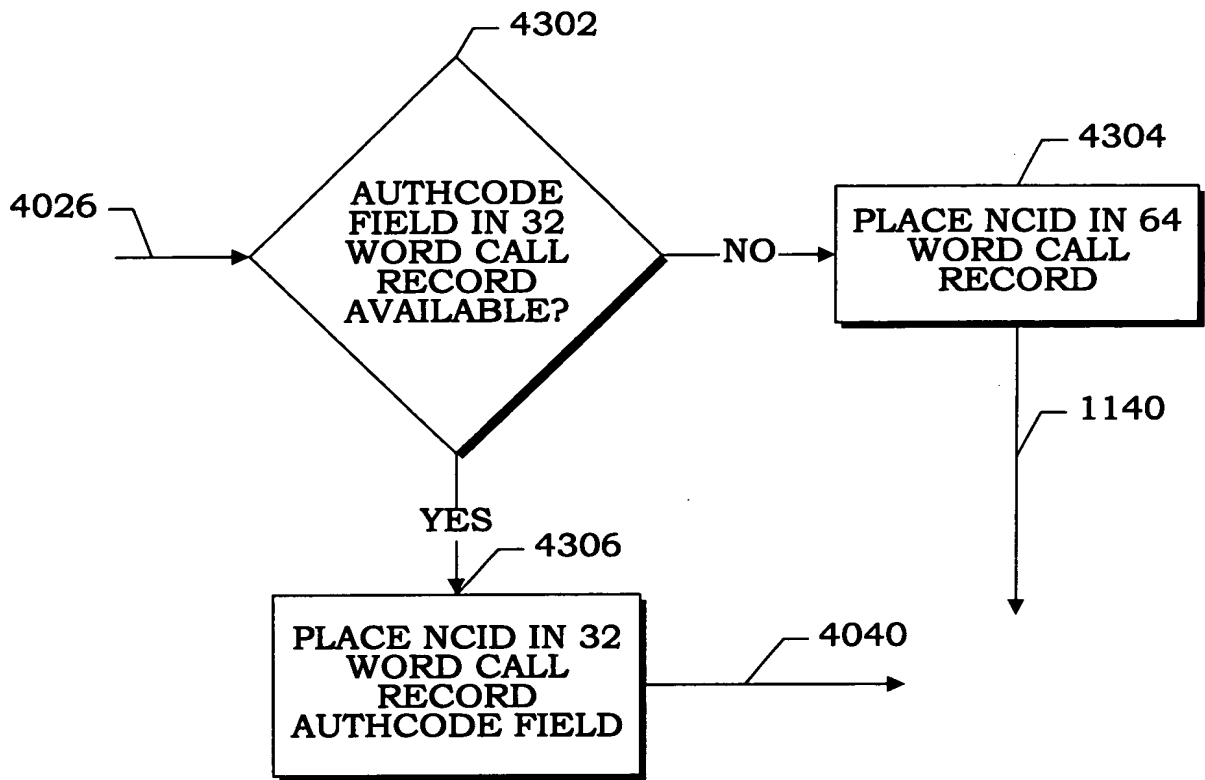


Figure 43

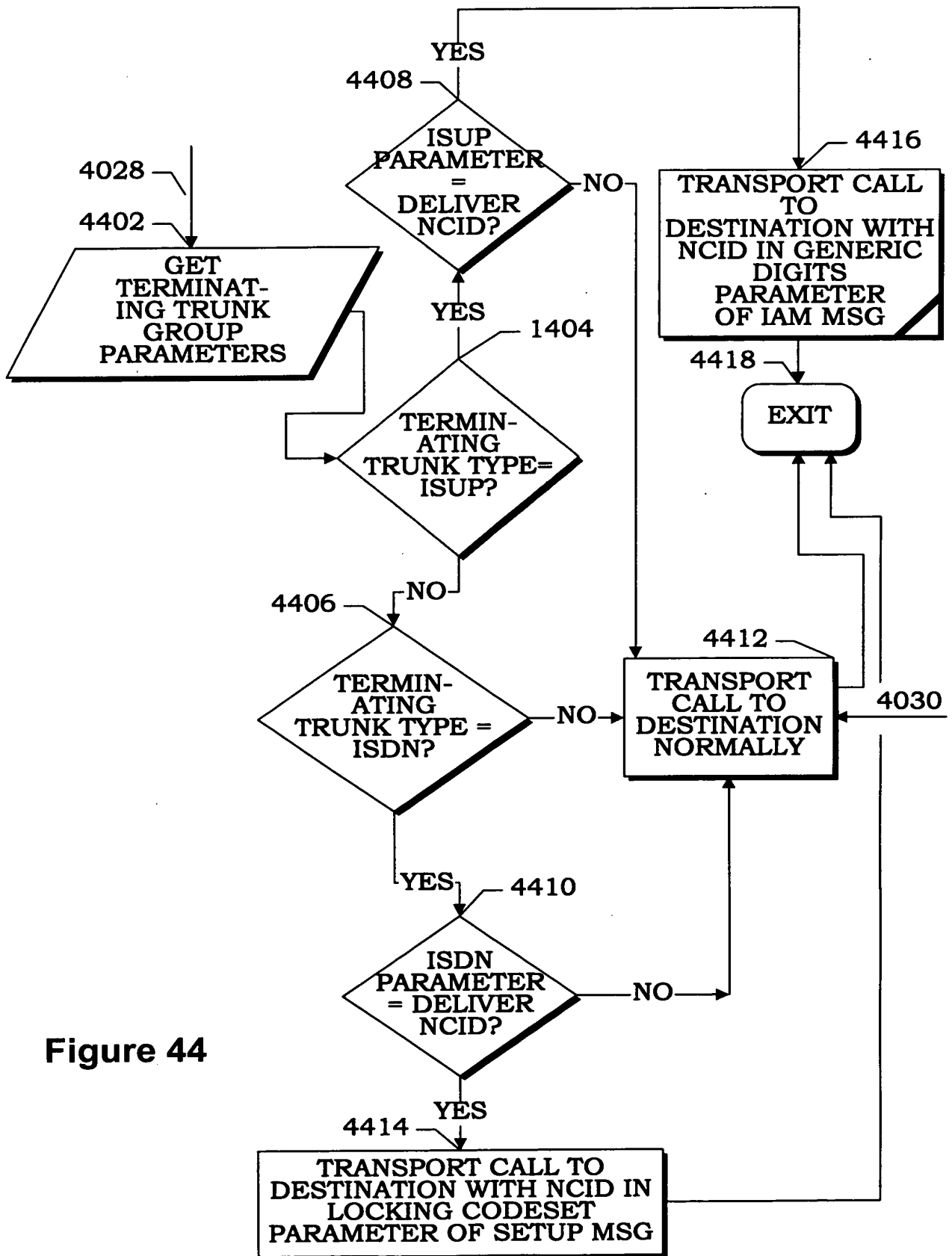


Figure 44

4500

**Transmit data over a hybrid
communication system**

4502

**Obtain a First Event From a CS-
Network Element**

4504

**Correlate the First Event With a
Second Event Obtained From a PS-
Network Element**

4506

**Create a Fault Message Based on
the Correlated First and Second
Events**

4508

Figure 45

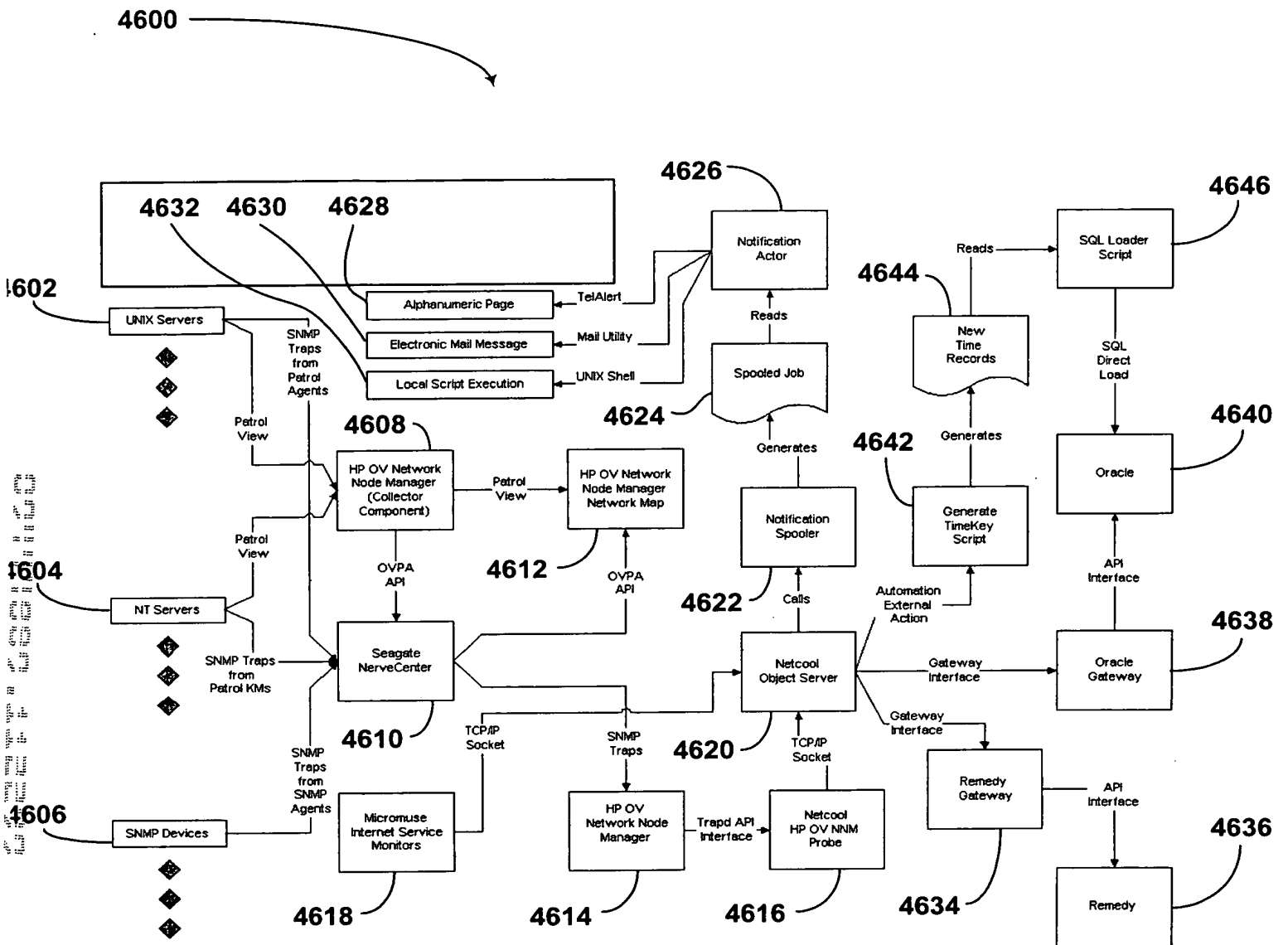


Figure 46

4700

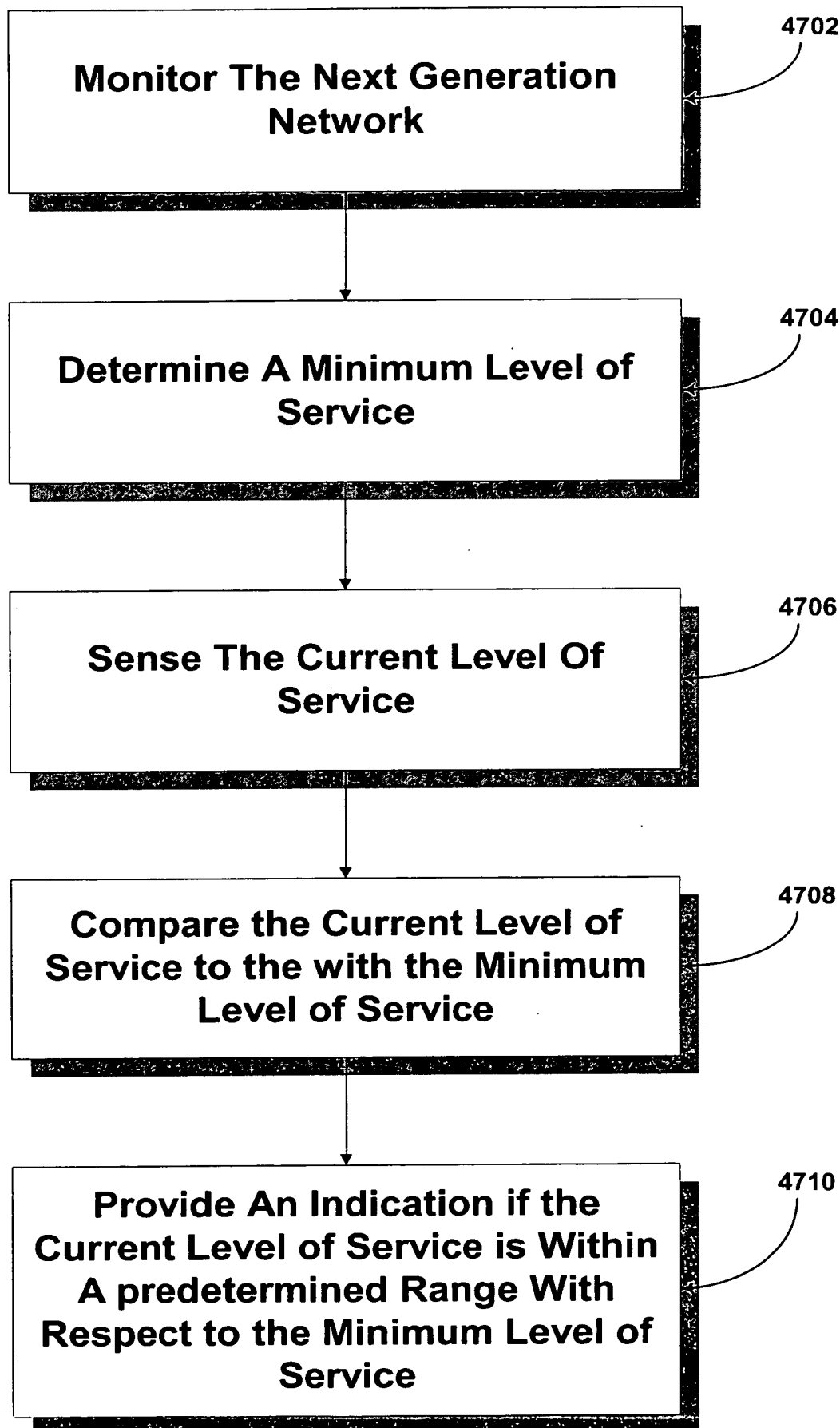


Figure 47

4800

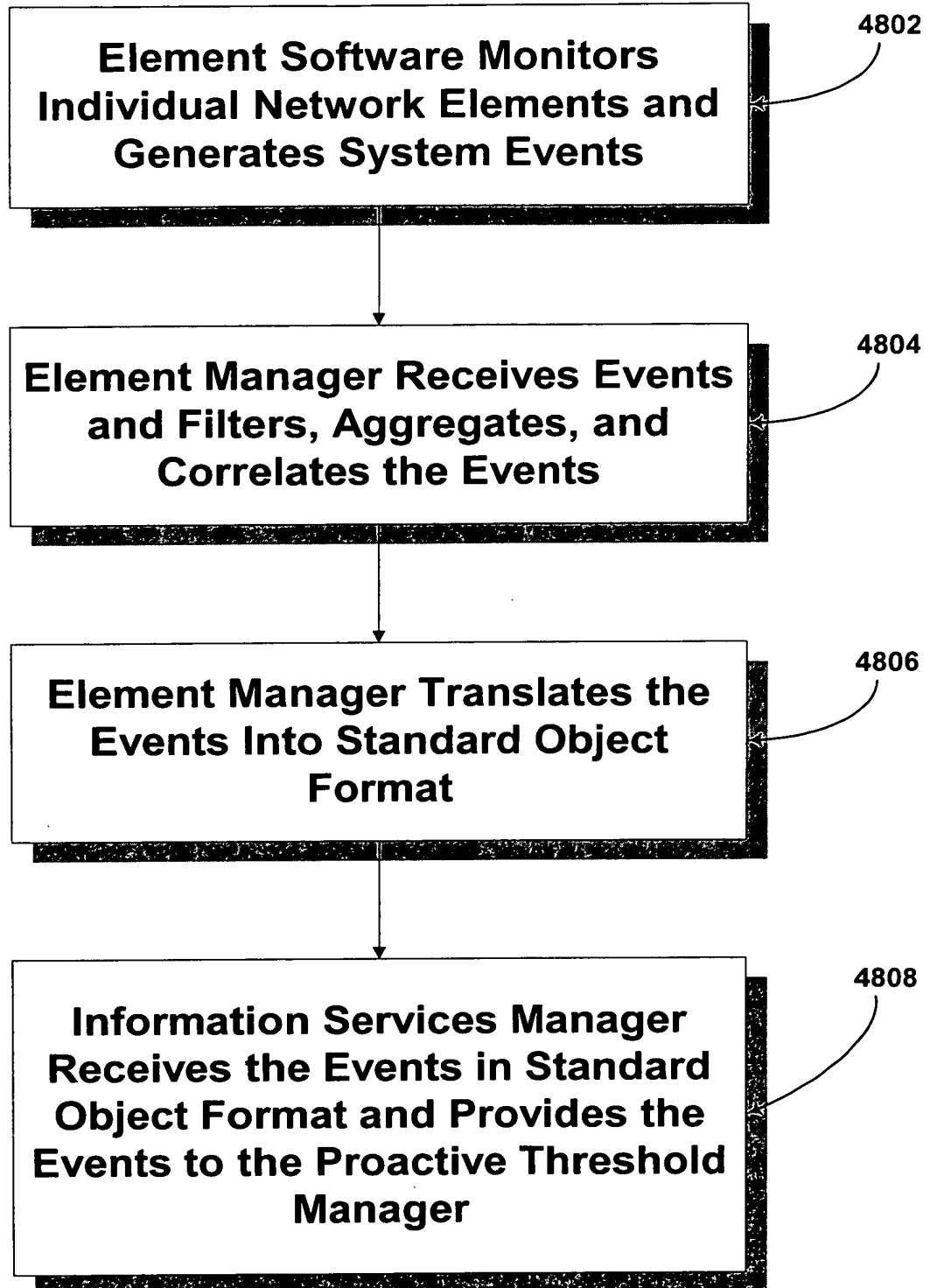


Figure 48

4900

**Monitor The Next Generation
Network**

4902

**Receive Events From Network
Elements**

4904

**Filter and Correlate the Received
Events**

4906

**Translate the Events Into Standard
Object Format**

4908

Figure 49

5000

**Provide Customer Access to
General Technicians**

5002

**Provide Customer Access to
Expert Technicians**

5004

**Provide Customer Access to
Solution Experts**

5006

Figure 50

5100

**Transmit data over a hybrid
communication system during a
data session**

5102

**Allow telephonic communication
over the hybrid communication
system during the data session**

5104

**Route the telephonic
communication over the hybrid
communication system via a user
action**

5106

**Limit the telephonic
communication over the hybrid
communication system based on a
user profile**

5108

Figure 51

5200

**Identify Patterns and Correlations
in System Data**

5202

**Build a Model of a Behavior of the
Network Based on the Patterns
and Correlations**

5204

**Predict Future Behavior of the
of the Network Based on the Model**

5206

**Manage the Network Based on the
Predicted Future Behavior of the
Network**

5208

Figure 52

Figure 53: A hierarchical diagram of web services categorized into Security, Network, Internet, Client, Commerce, Web Application, Education, Web Customer, Content Mgmt & Publishing, Customer Relationship, Integration, Common Web, Management & Operations, Directory, and Web Developer services. Each category is further divided into specific sub-services.

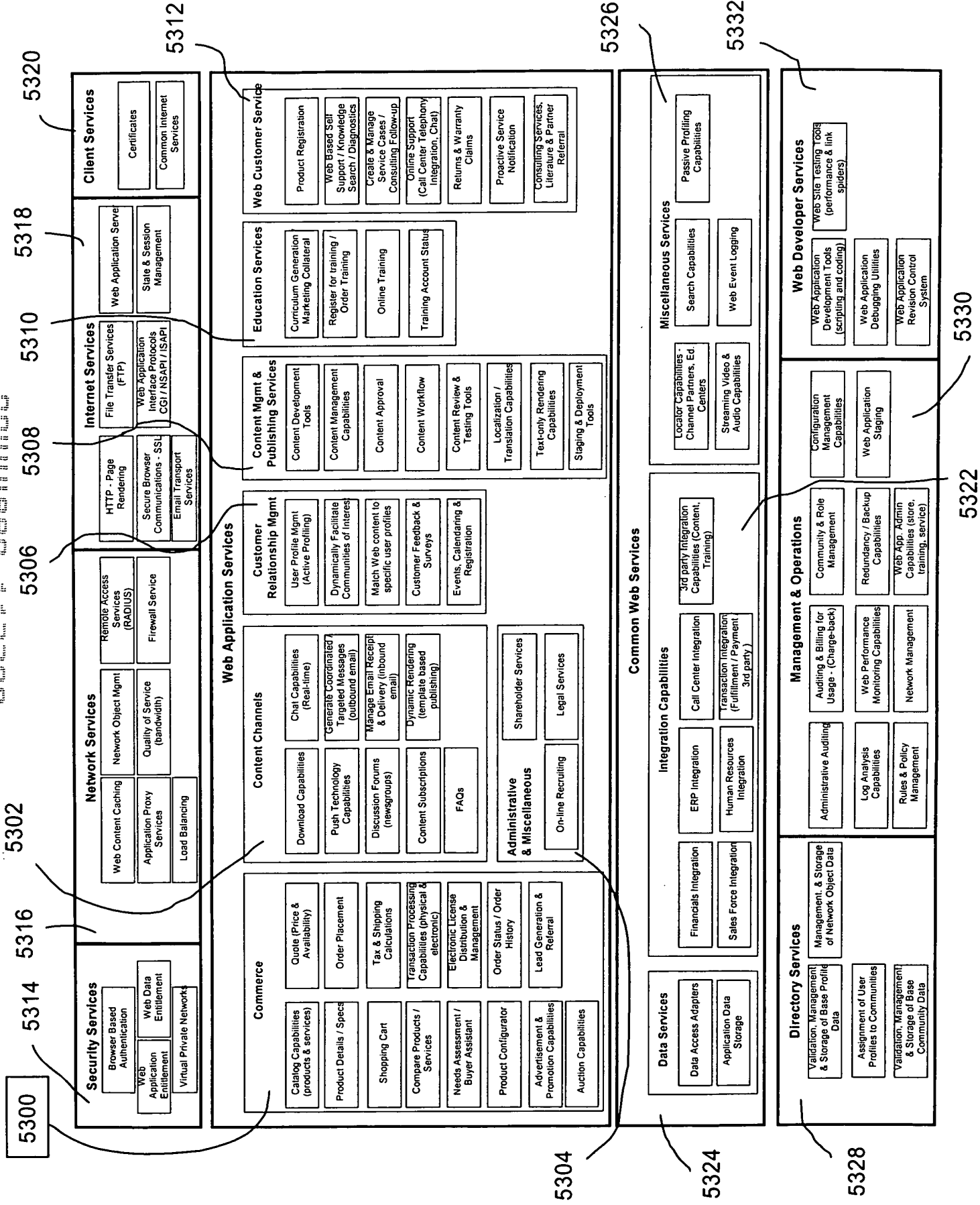


Figure 53

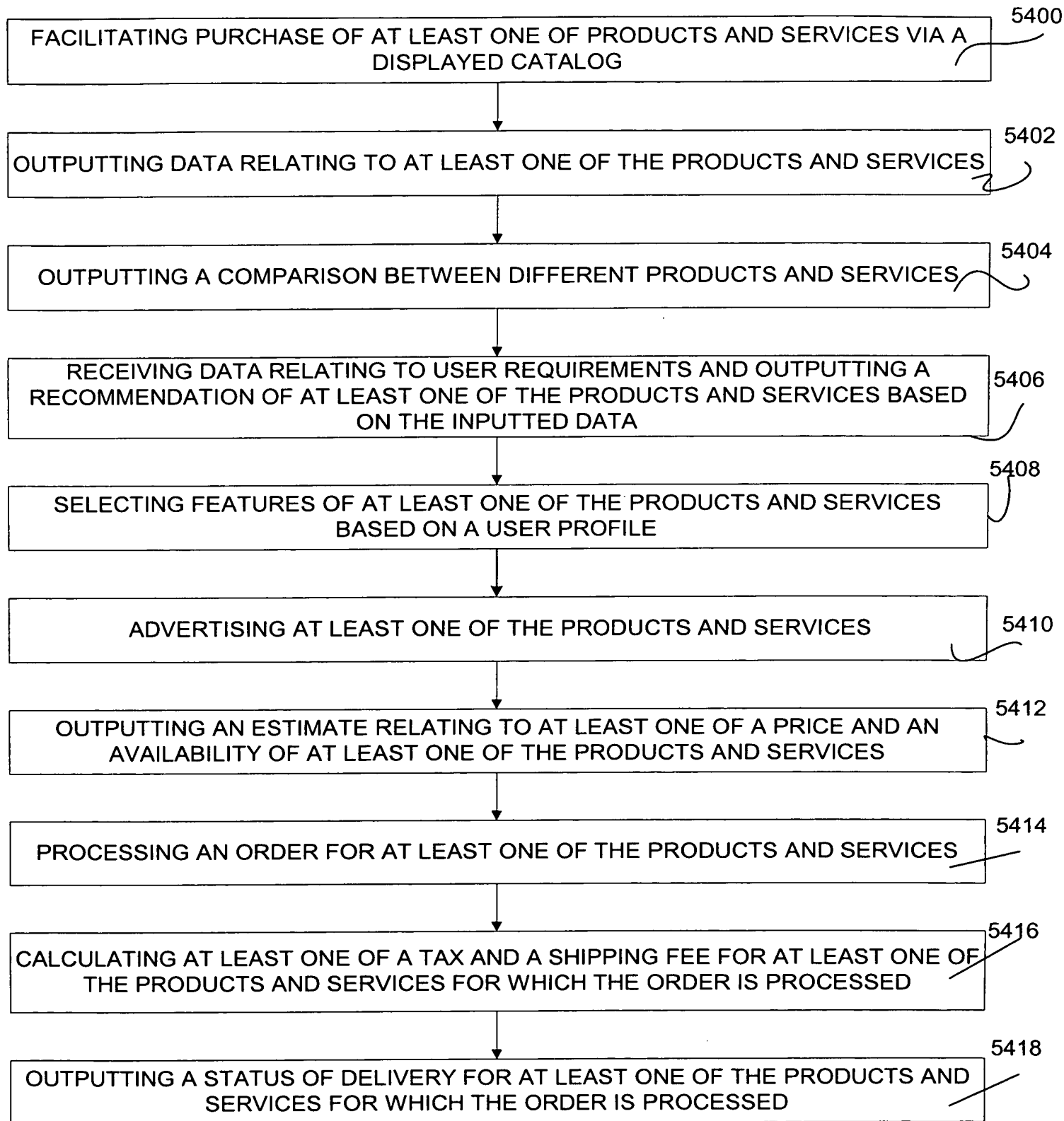


Figure 54

500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000

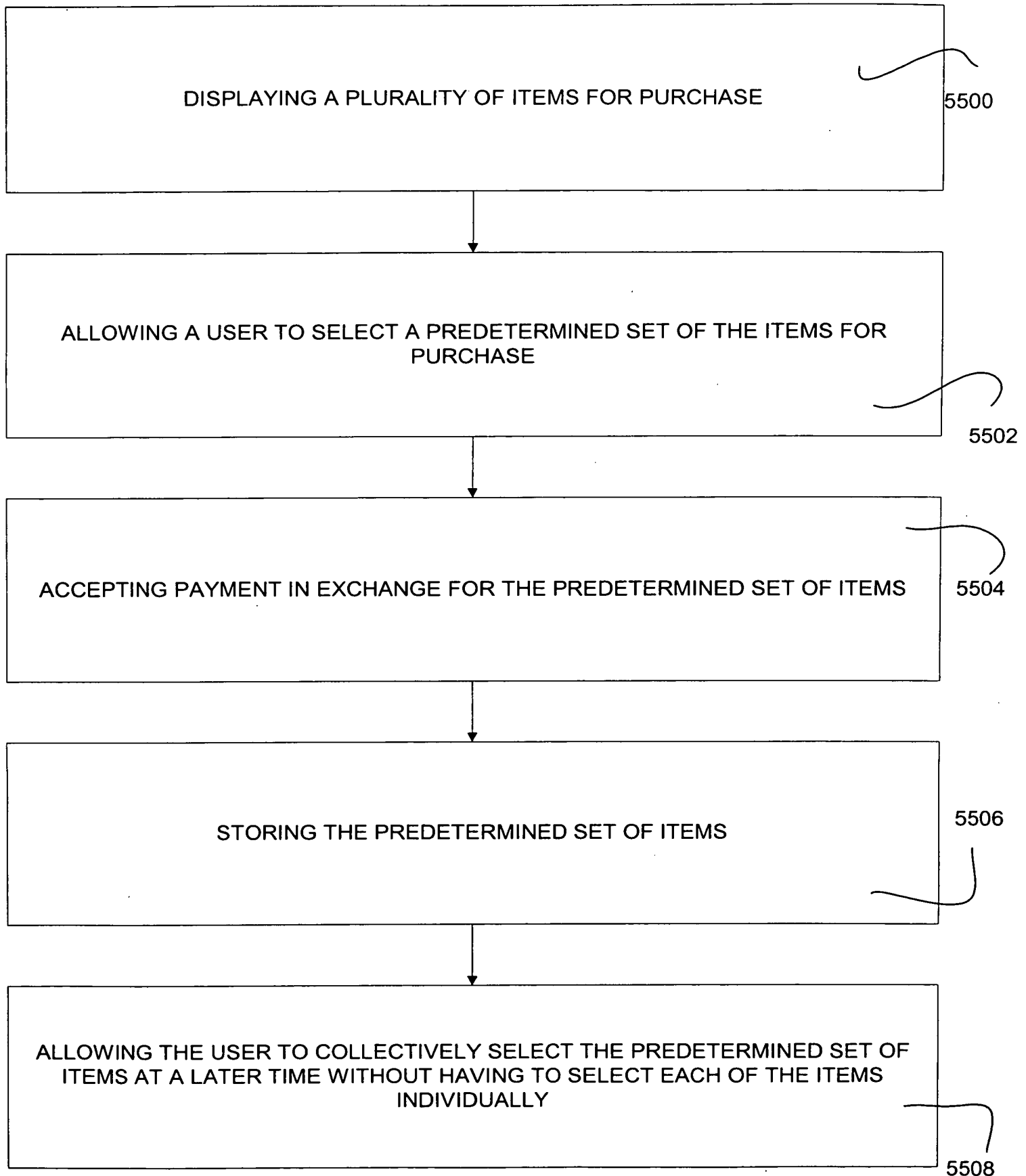
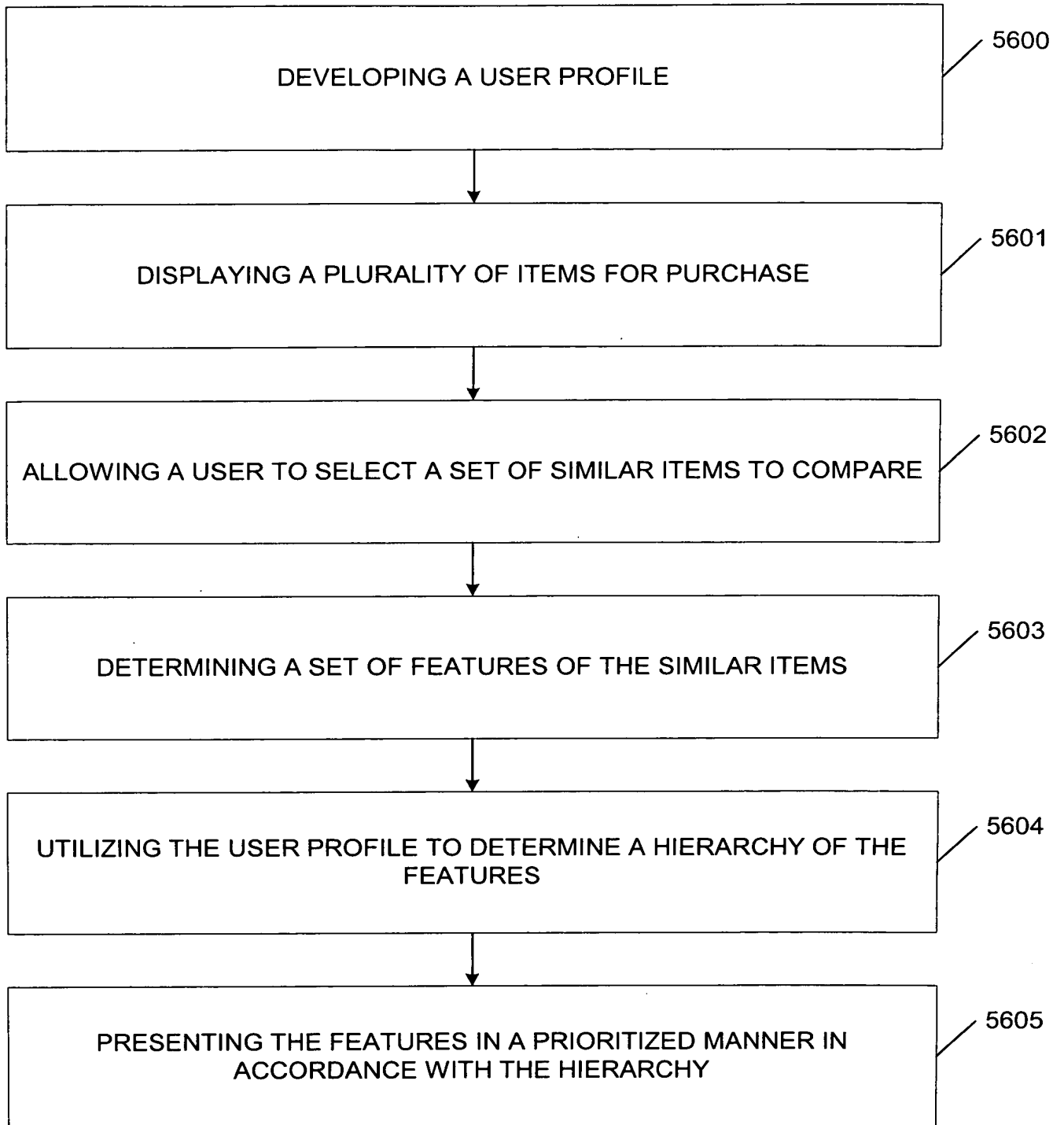


Figure 55



5404

Figure 56

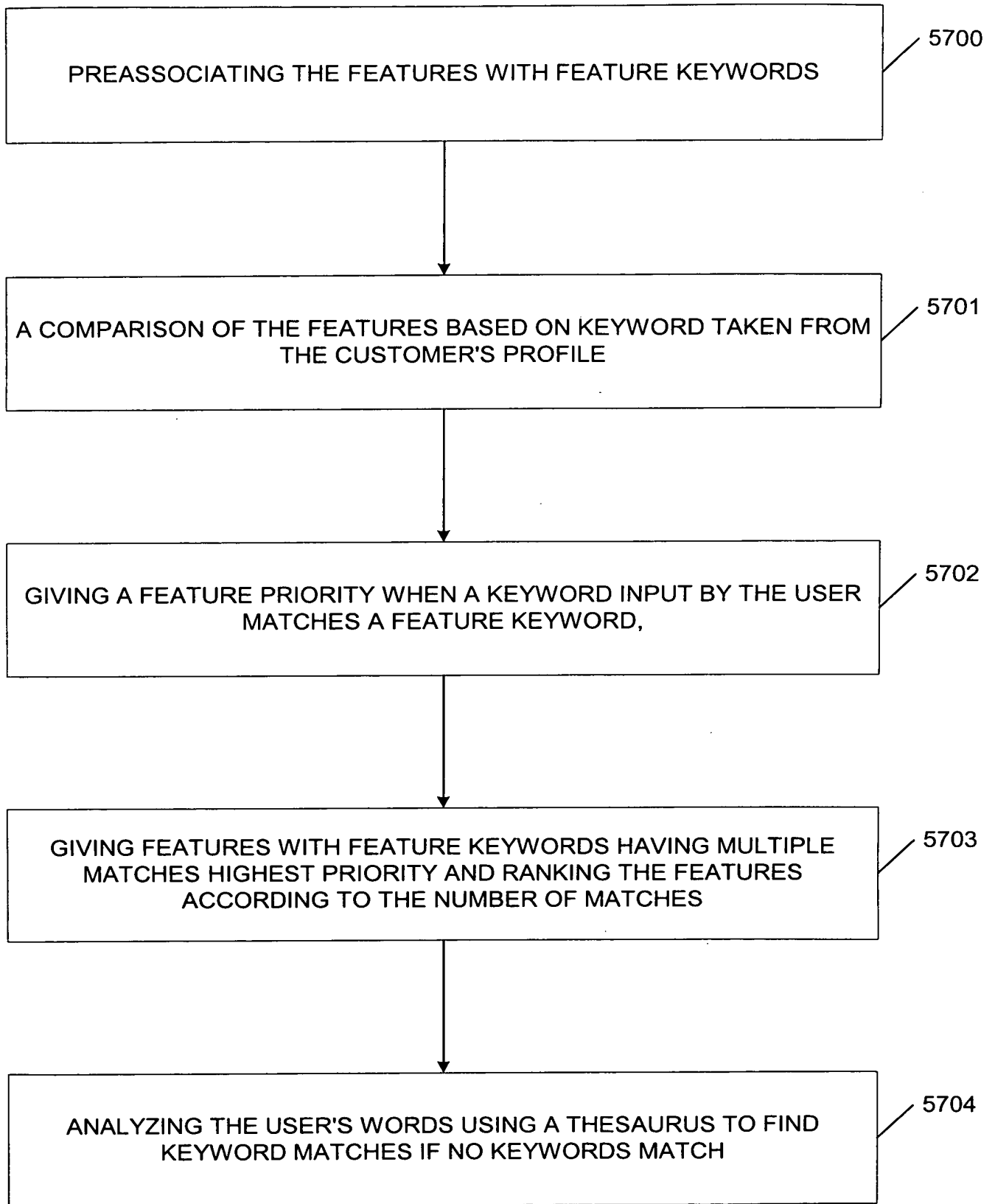


Figure 57

ANALYZING USER REQUIREMENTS

5802

REVIEWING AVAILABLE PRODUCTS

5804

GENERATING AT LEAST ONE RECOMMENDED SOLUTION BASED ON THE USER
REQUIREMENTS

5806

DISPLAYING THE AT LEAST ONE RECOMMENDED SOLUTION

5808

ACCEPTING PAYMENT IN EXCHANGE FOR THE AT LEAST ONE SOLUTION

Figure 58

5810

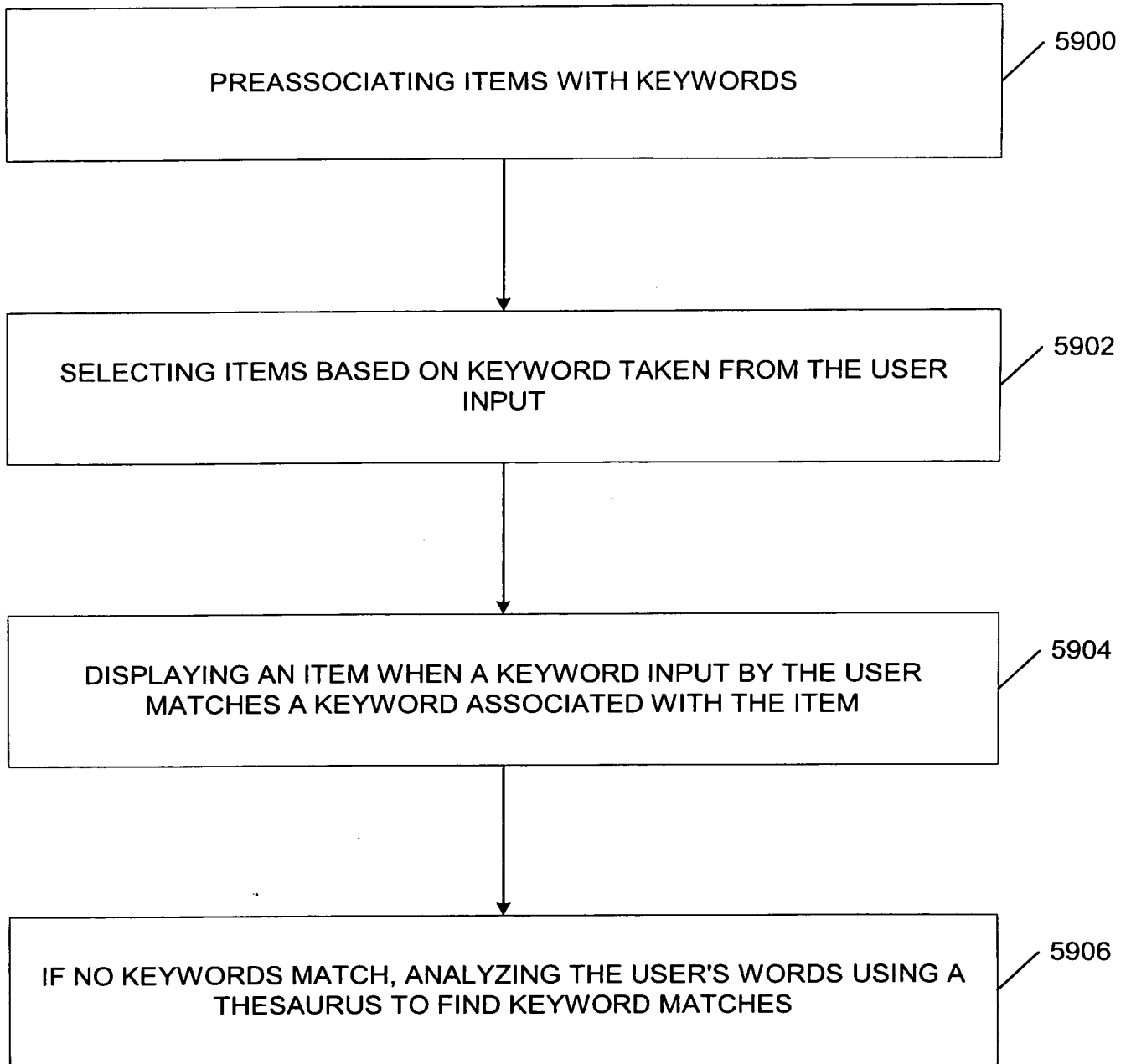


Figure 59

5806

DISPLAYING A PLURALITY OF ITEMS FOR PURCHASE, WHEREIN EACH OF THE ITEMS
INCLUDES A PLURALITY OF AVAILABLE FEATURES

6002

DISPLAYING THE AVAILABLE FEATURES OF THE ITEMS

6003

ALLOWING A USER TO SELECT THE AVAILABLE FEATURES OF EACH OF THE ITEMS
TO BE PURCHASED

6004

DETERMINING A PRICE AND AVAILABILITY OF THE SELECTED ITEMS AND THE
SELECTED FEATURES THEREOF AND DISPLAYING THE SAME

6006

ACCEPTING PAYMENT IN EXCHANGE FOR THE SELECTED ITEMS AND THE
SELECTED FEATURES THEREOF

6008

Figure 60

DISPLAYING A PLURALITY OF ITEMS FOR PURCHASE

6102

DISPLAYING ADVERTISEMENT INFORMATION WHICH RELATES TO AT LEAST ONE OF
THE ITEMS DISPLAYED FOR PURCHASE

6103

ALLOWING A USER TO SELECT THE ITEMS FOR PURCHASE

6104

ACCEPTING PAYMENT IN EXCHANGE FOR THE SELECTED ITEMS

6106

Figure 61

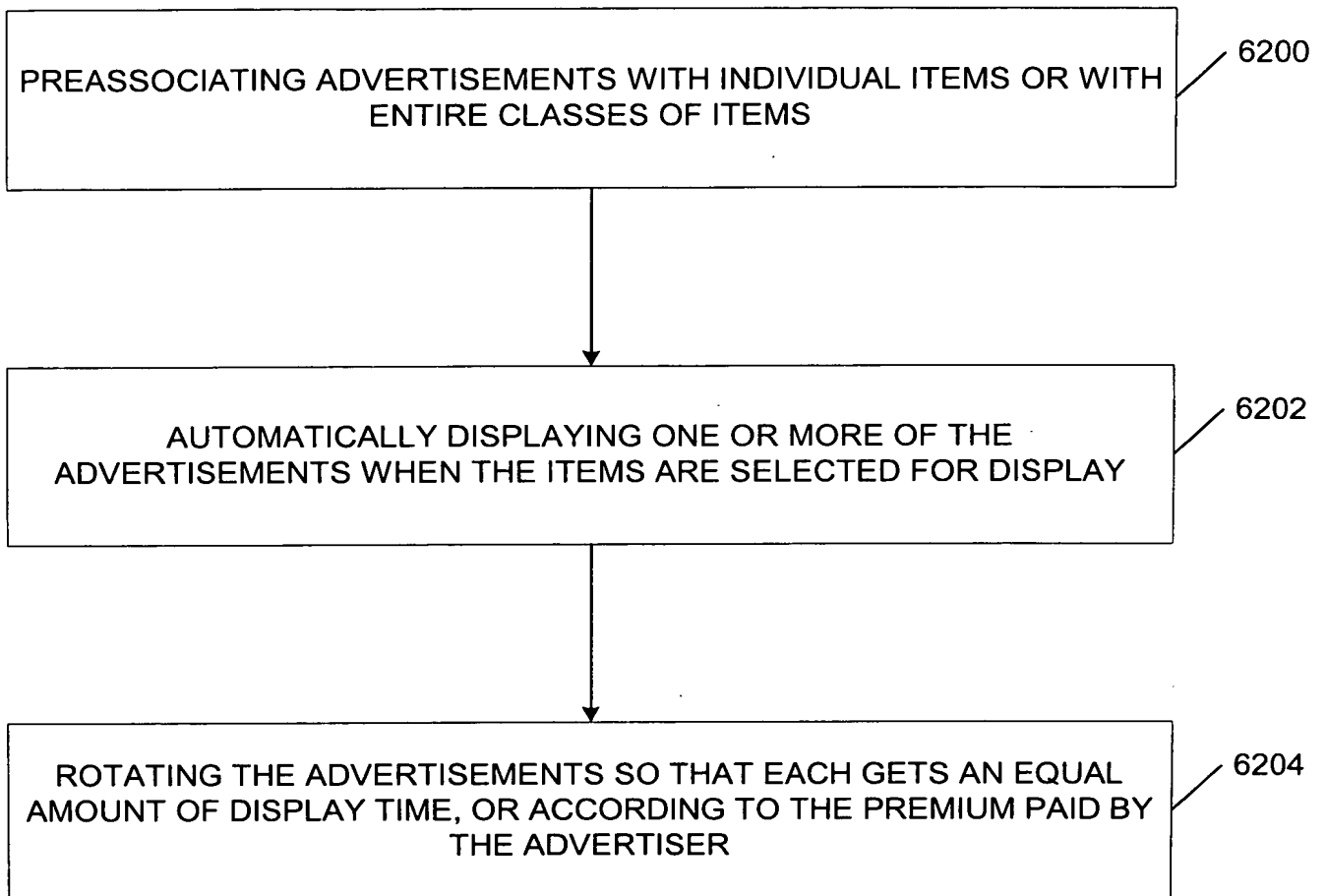


Figure 62

6103

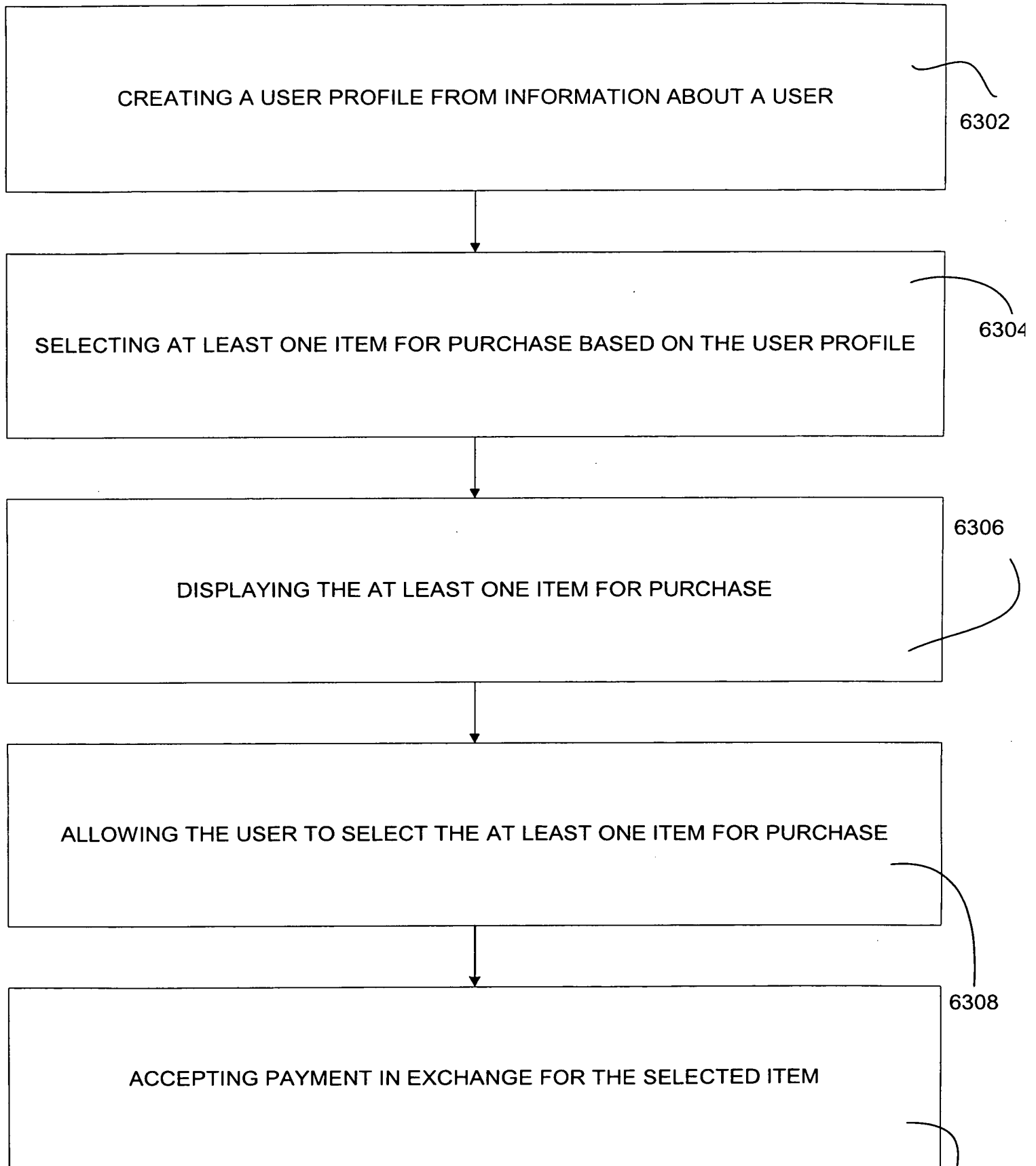
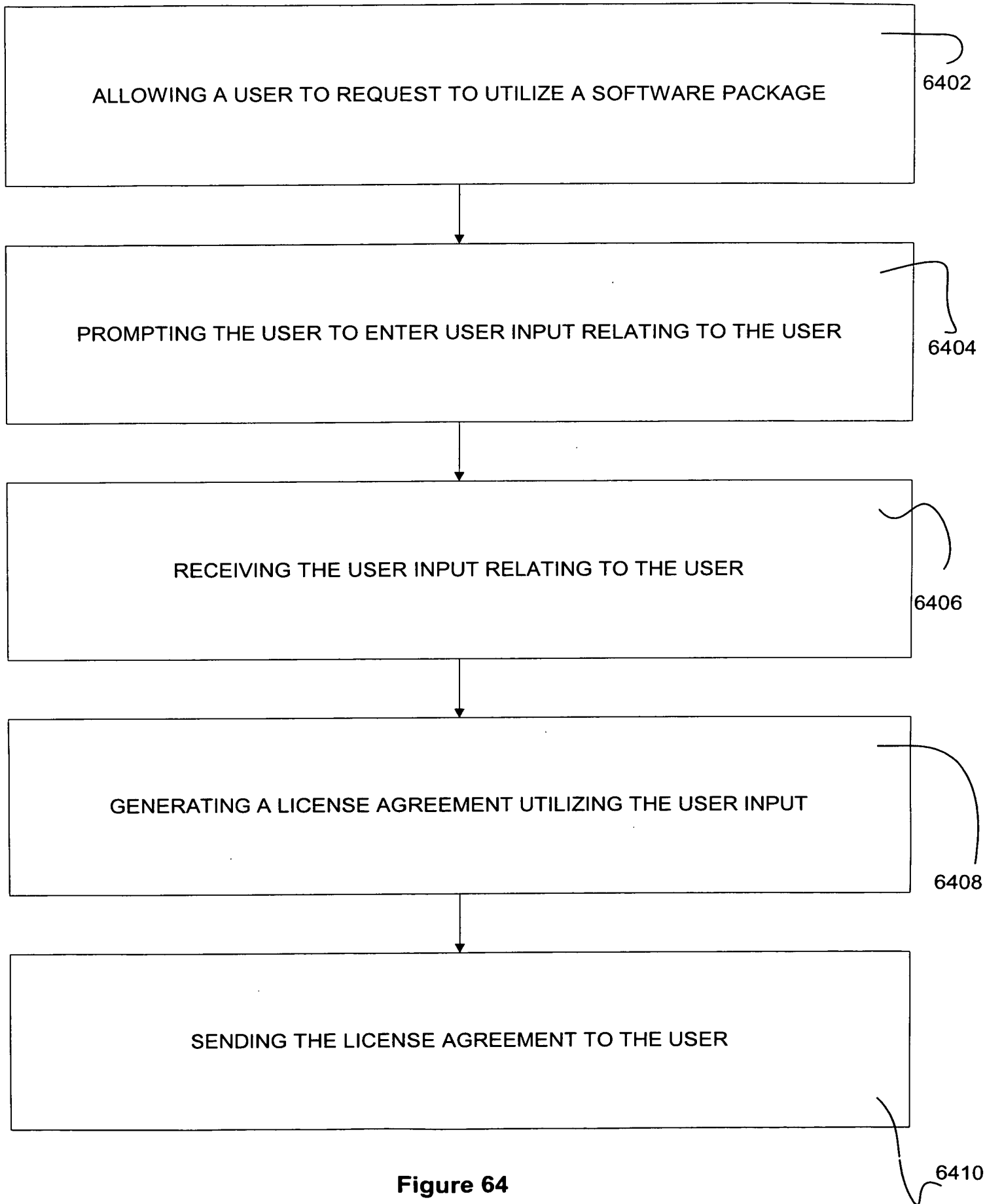


Figure 63

6402 6404 6406 6408 6410



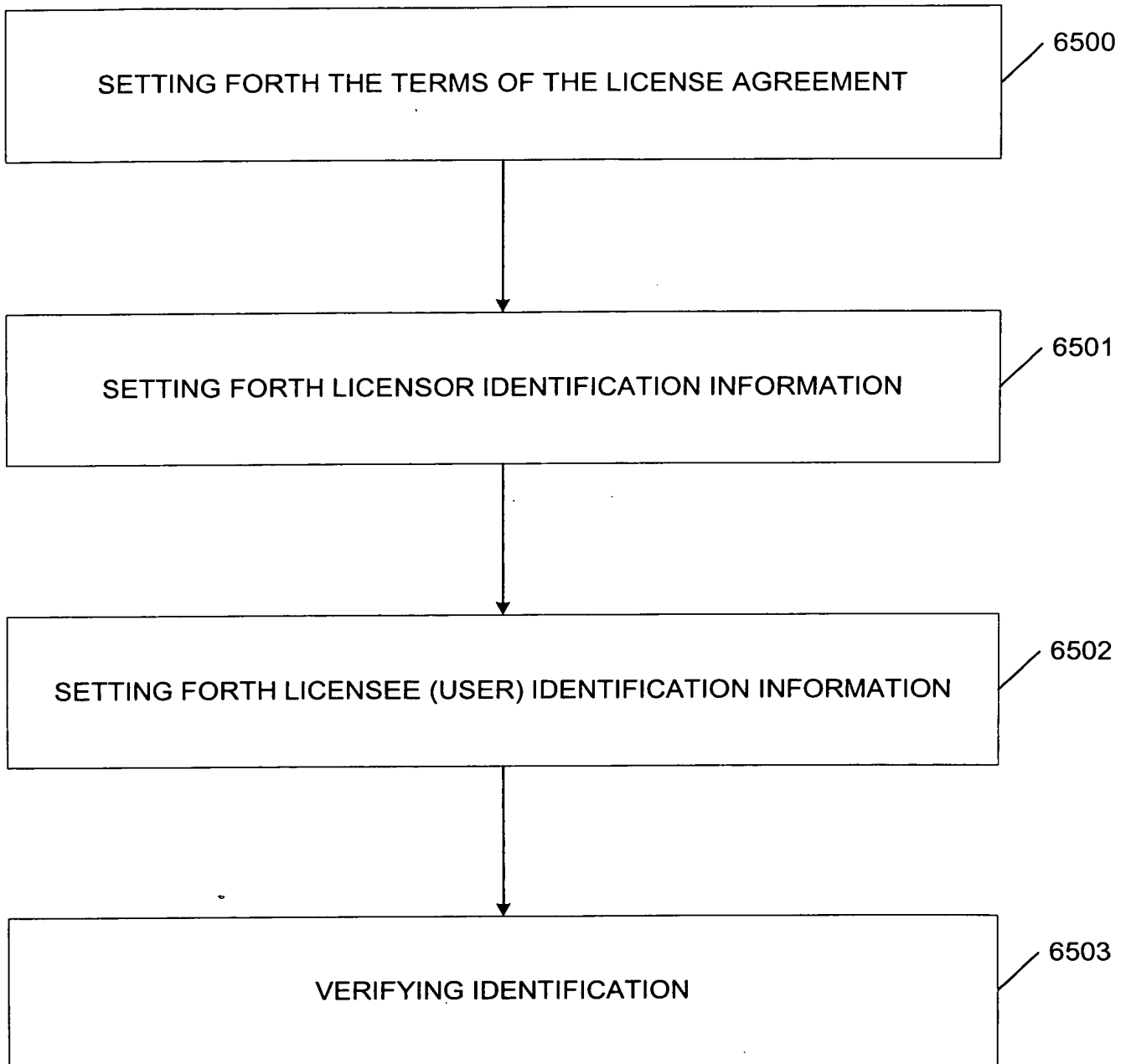
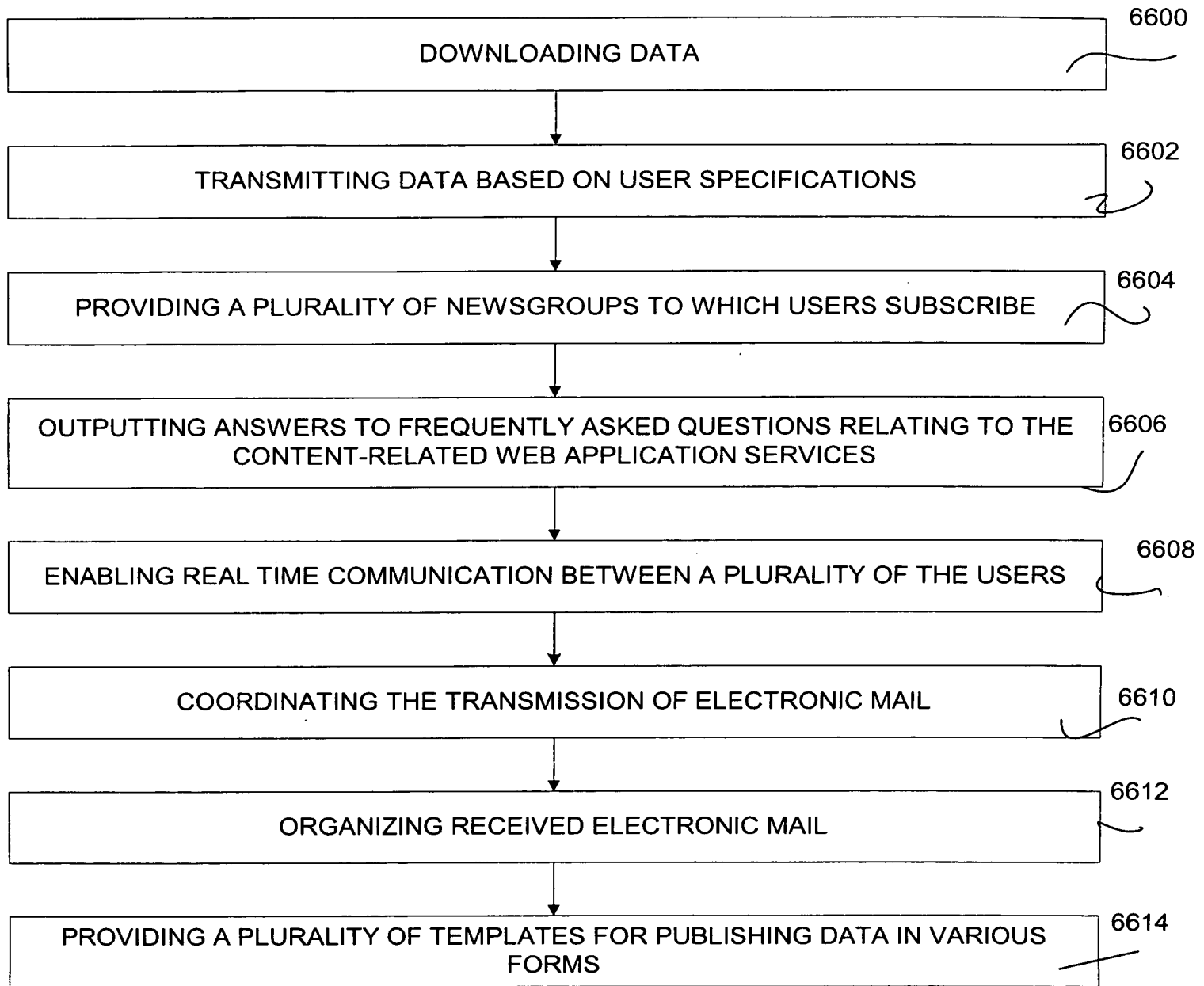


Figure 65

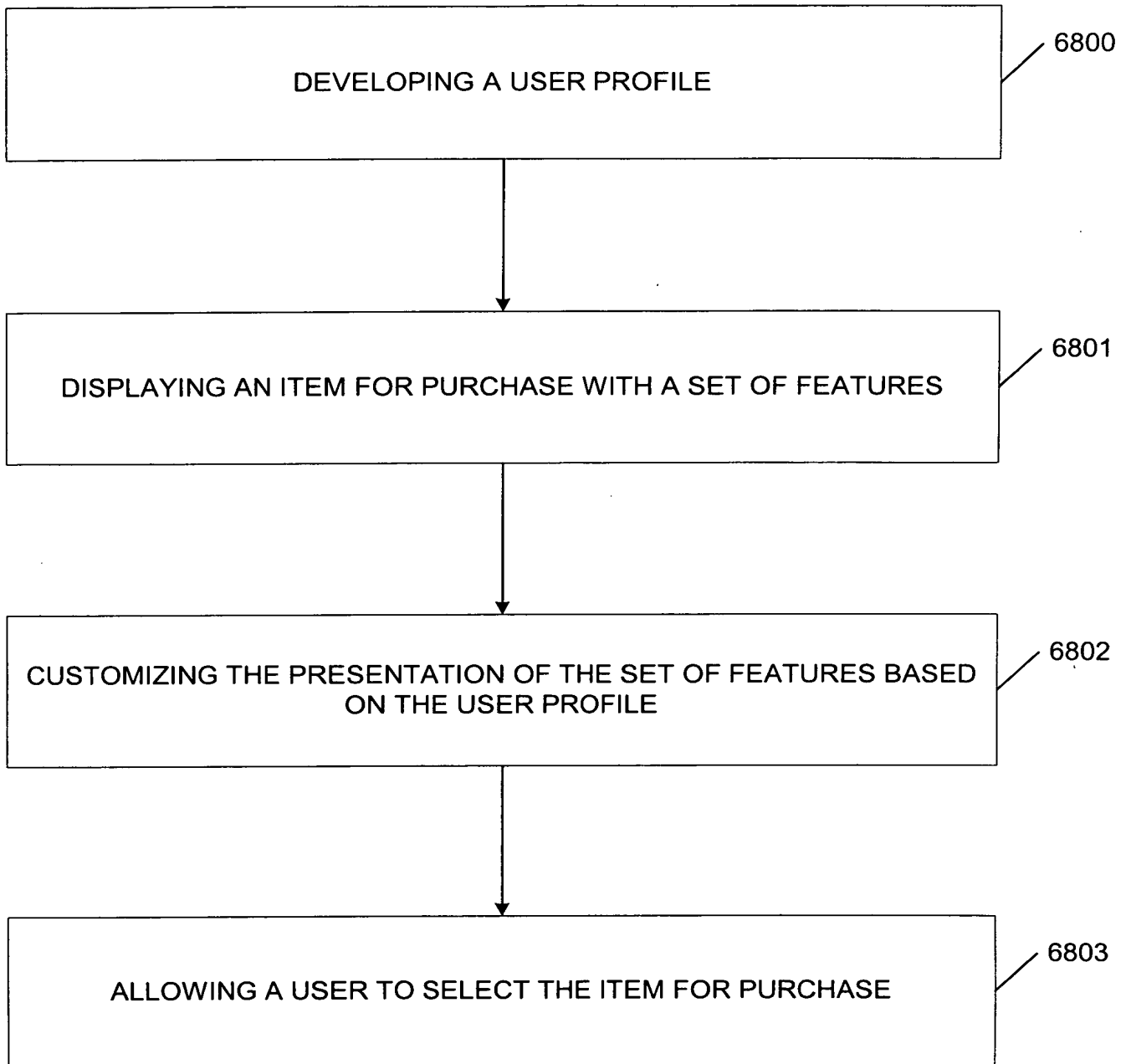
6408

5302



5302

Figure 66



6700

Figure 68

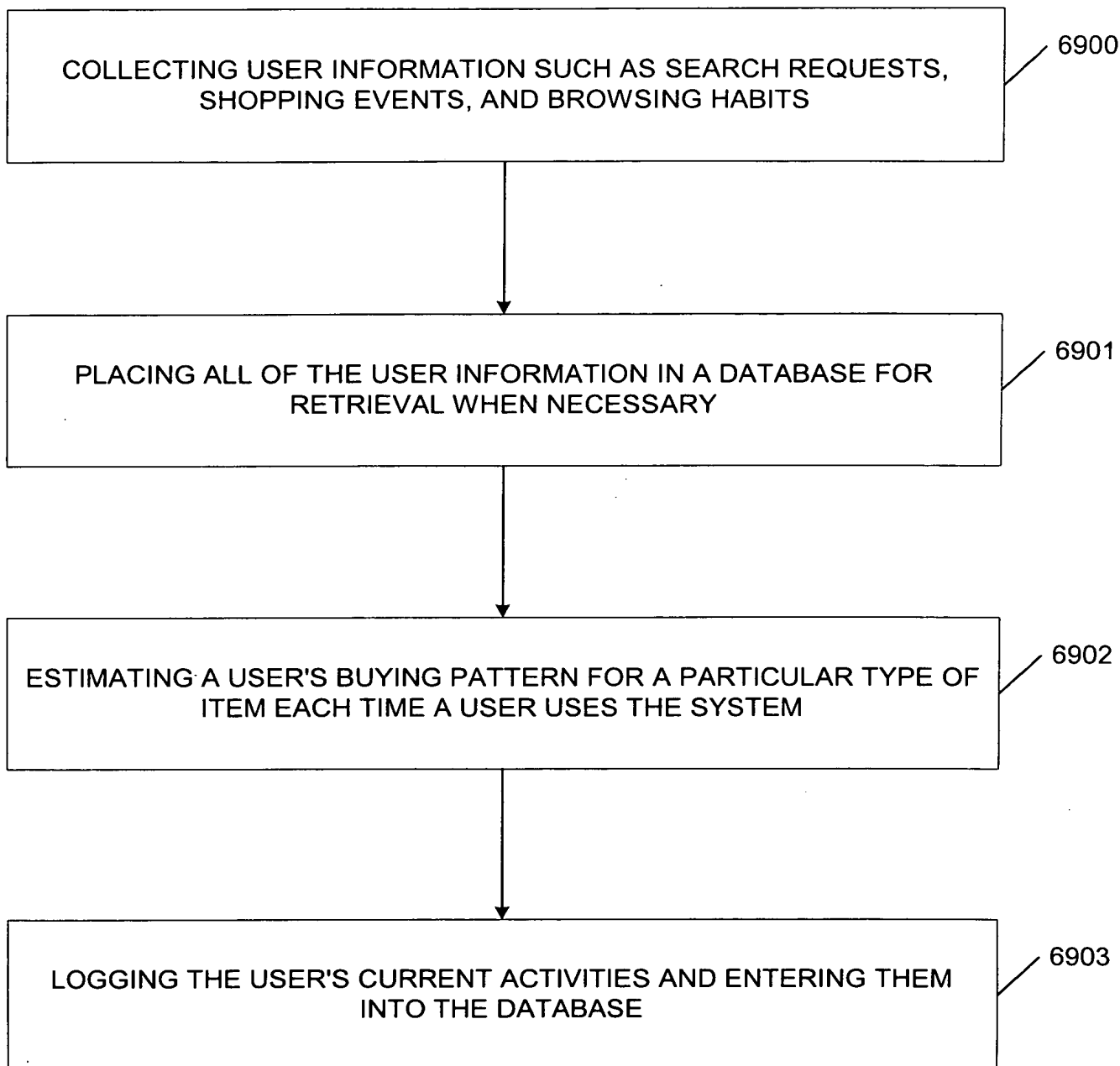


Figure 69

6810

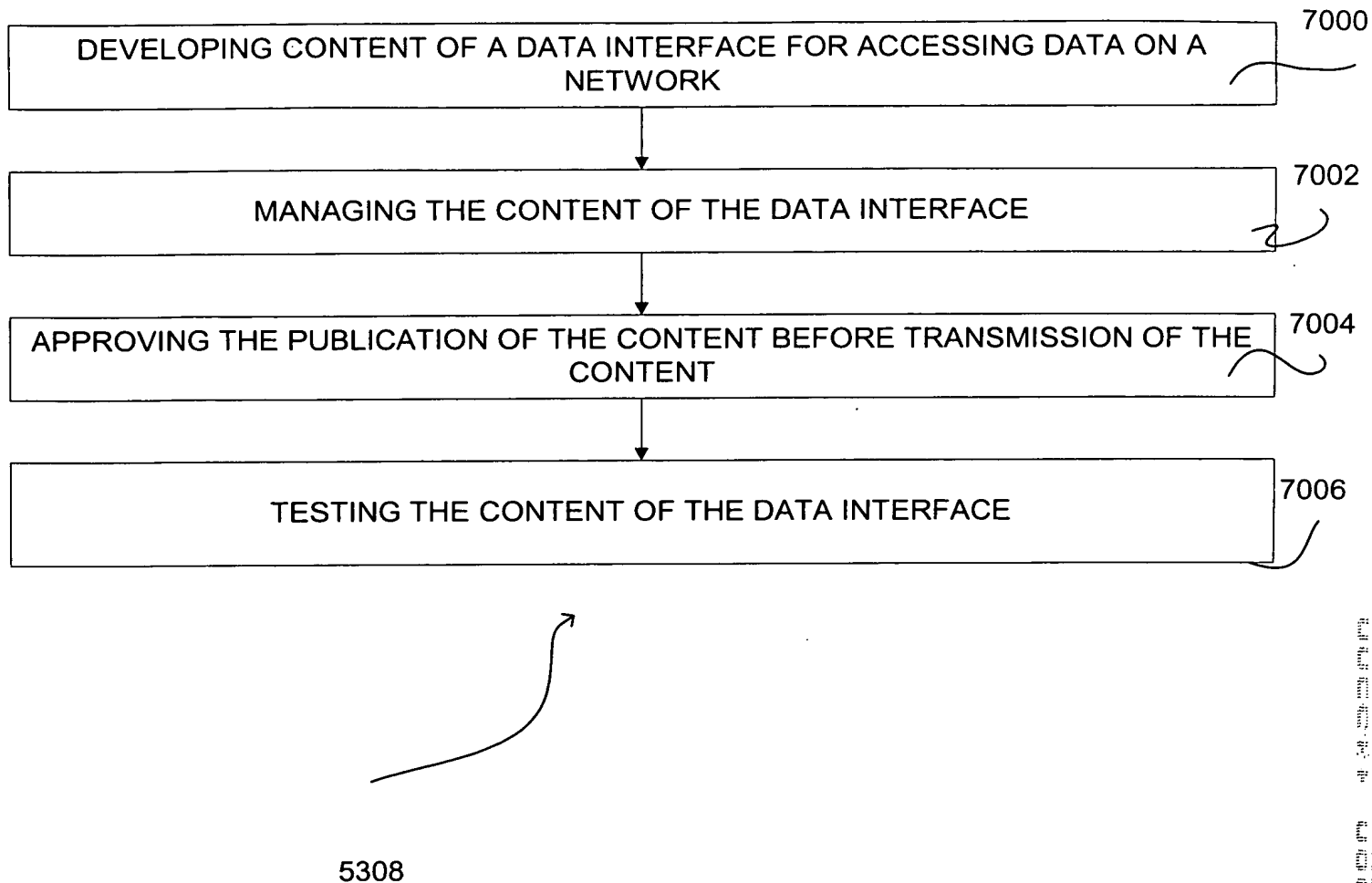
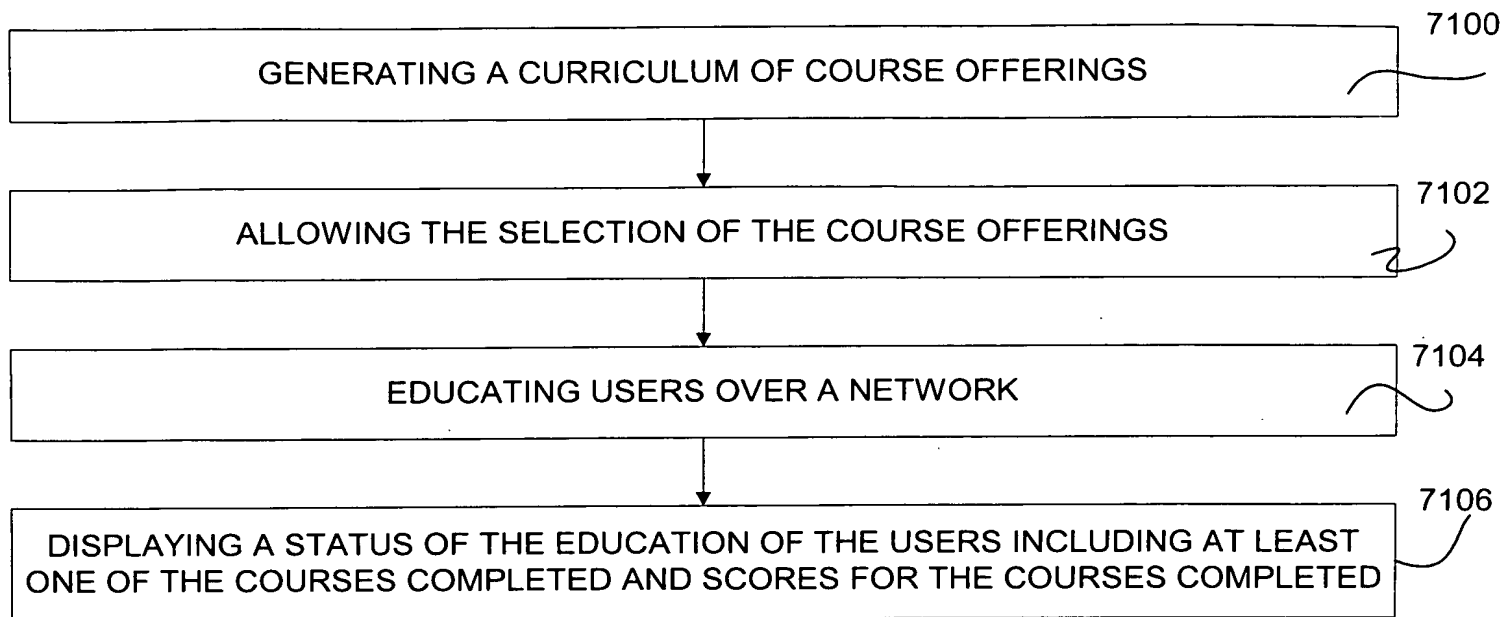


Figure 70



5310

Figure 71

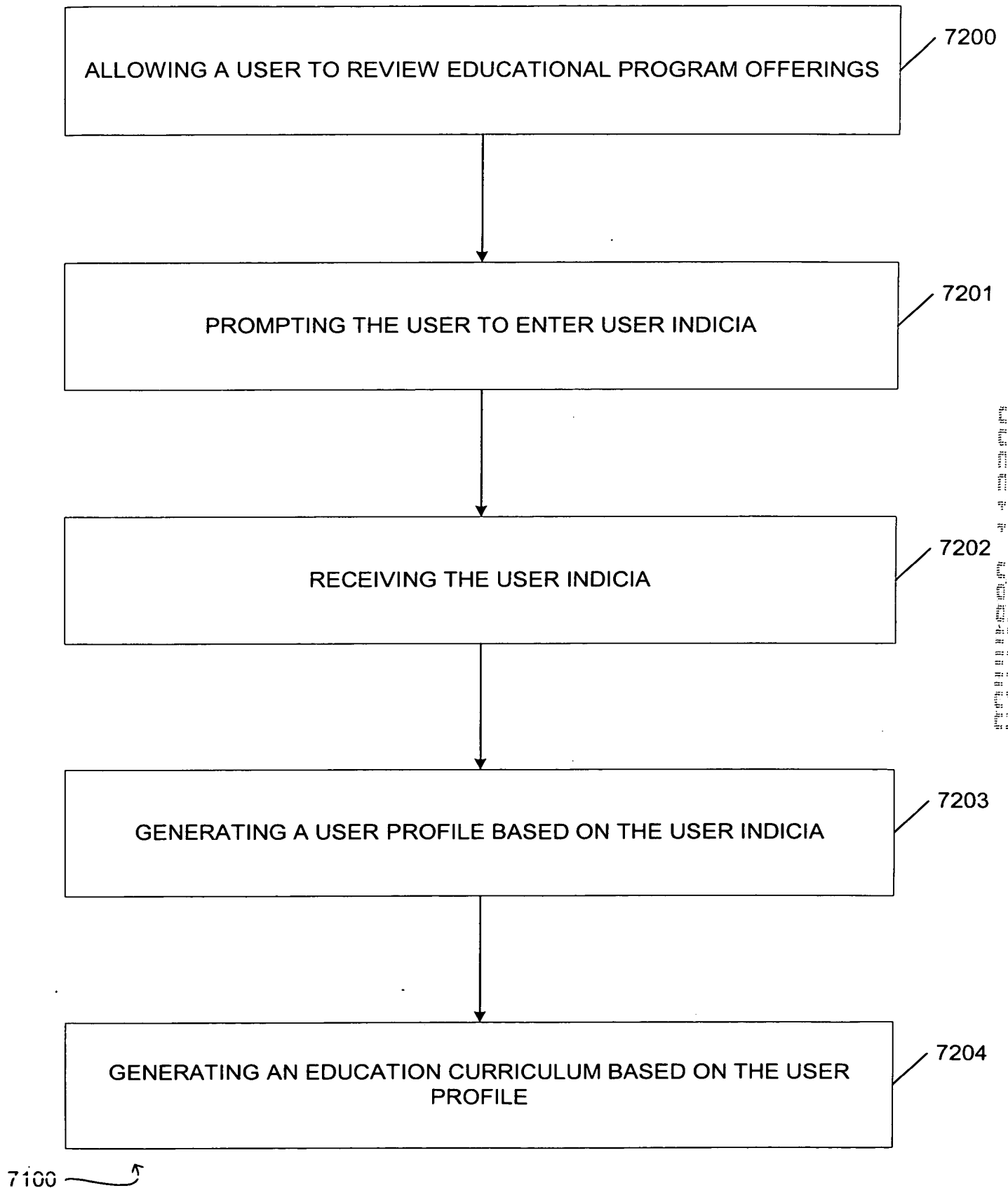


Figure 72

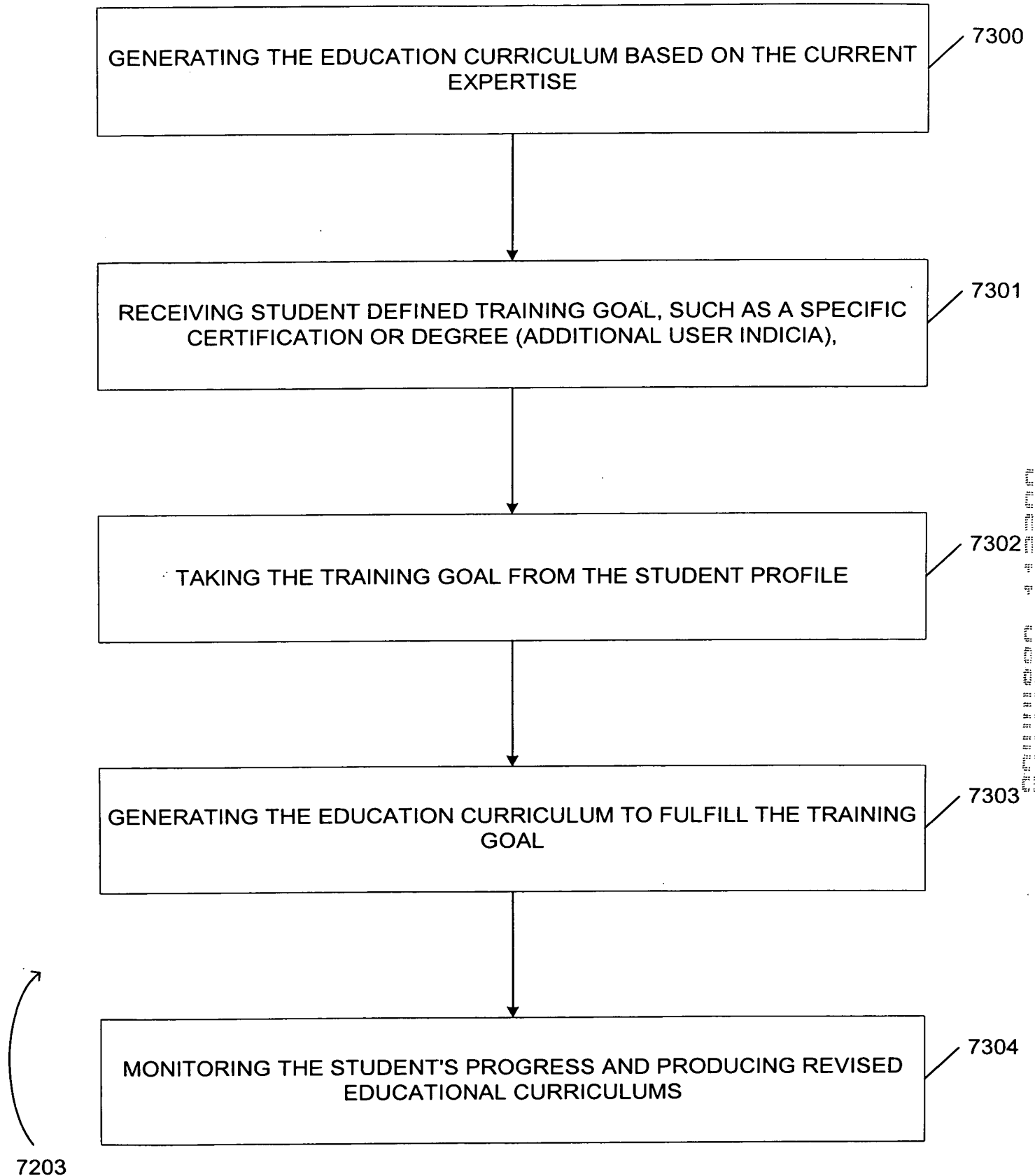


Figure 73

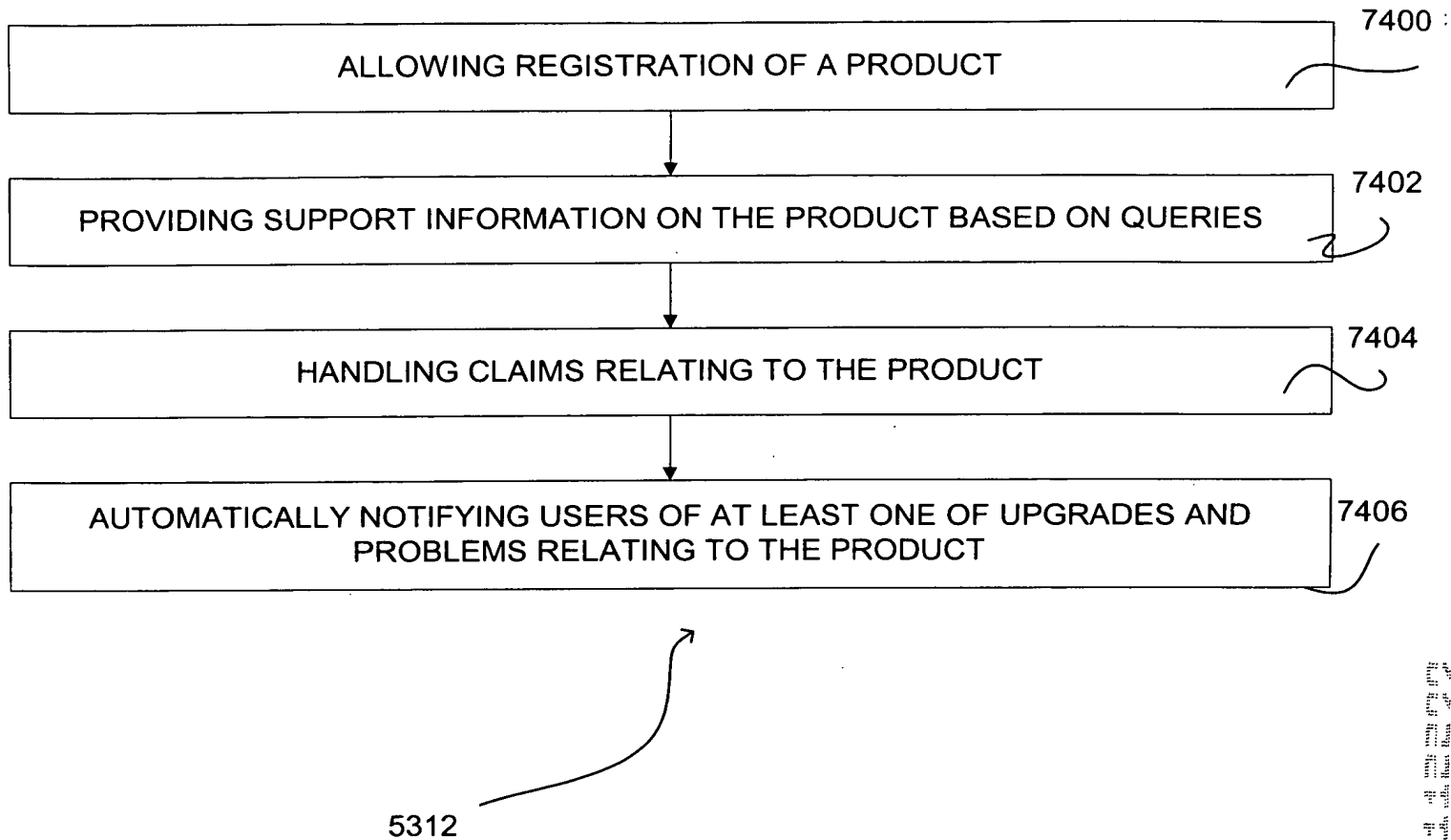
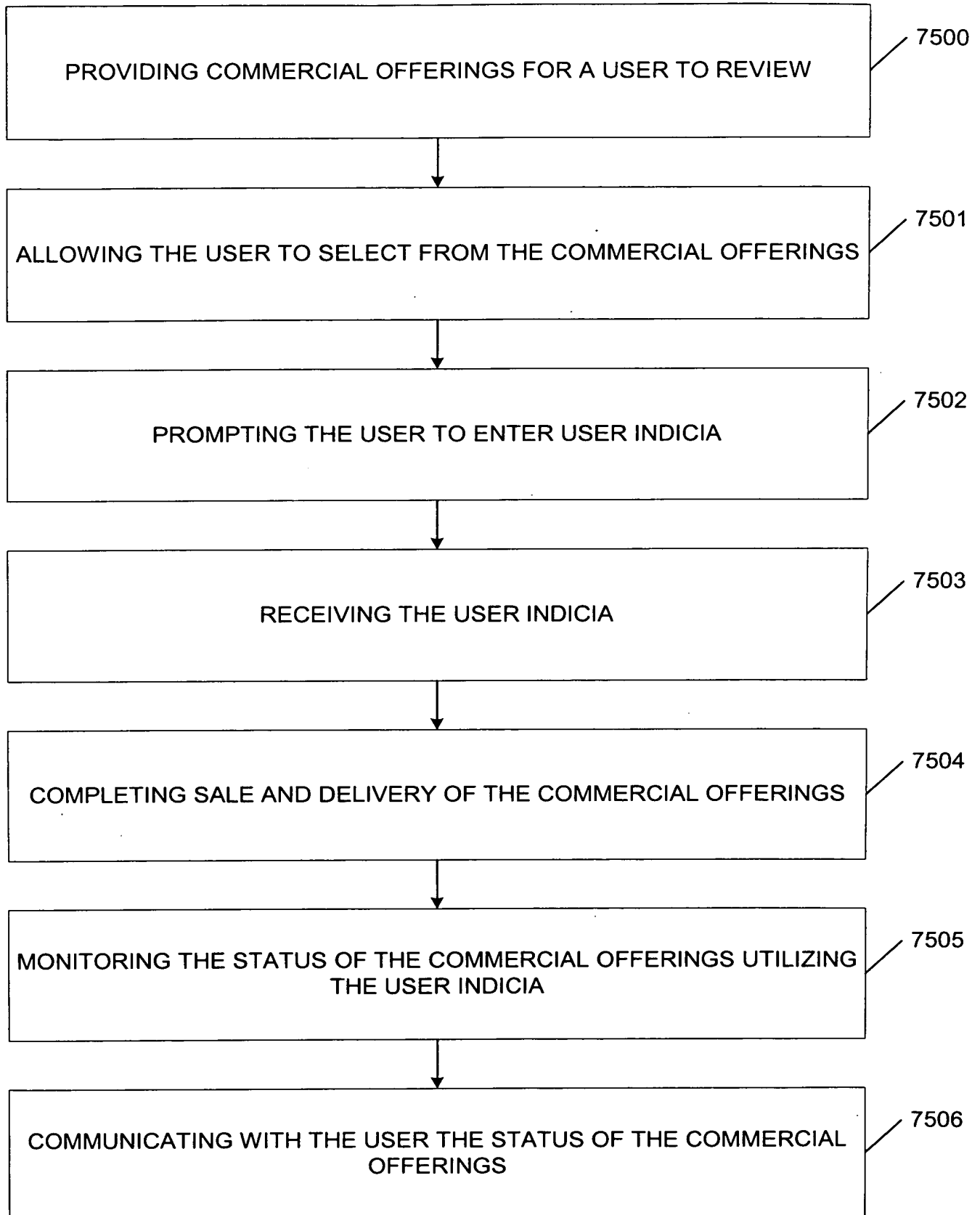


Figure 74



7406 ↗

Figure 75

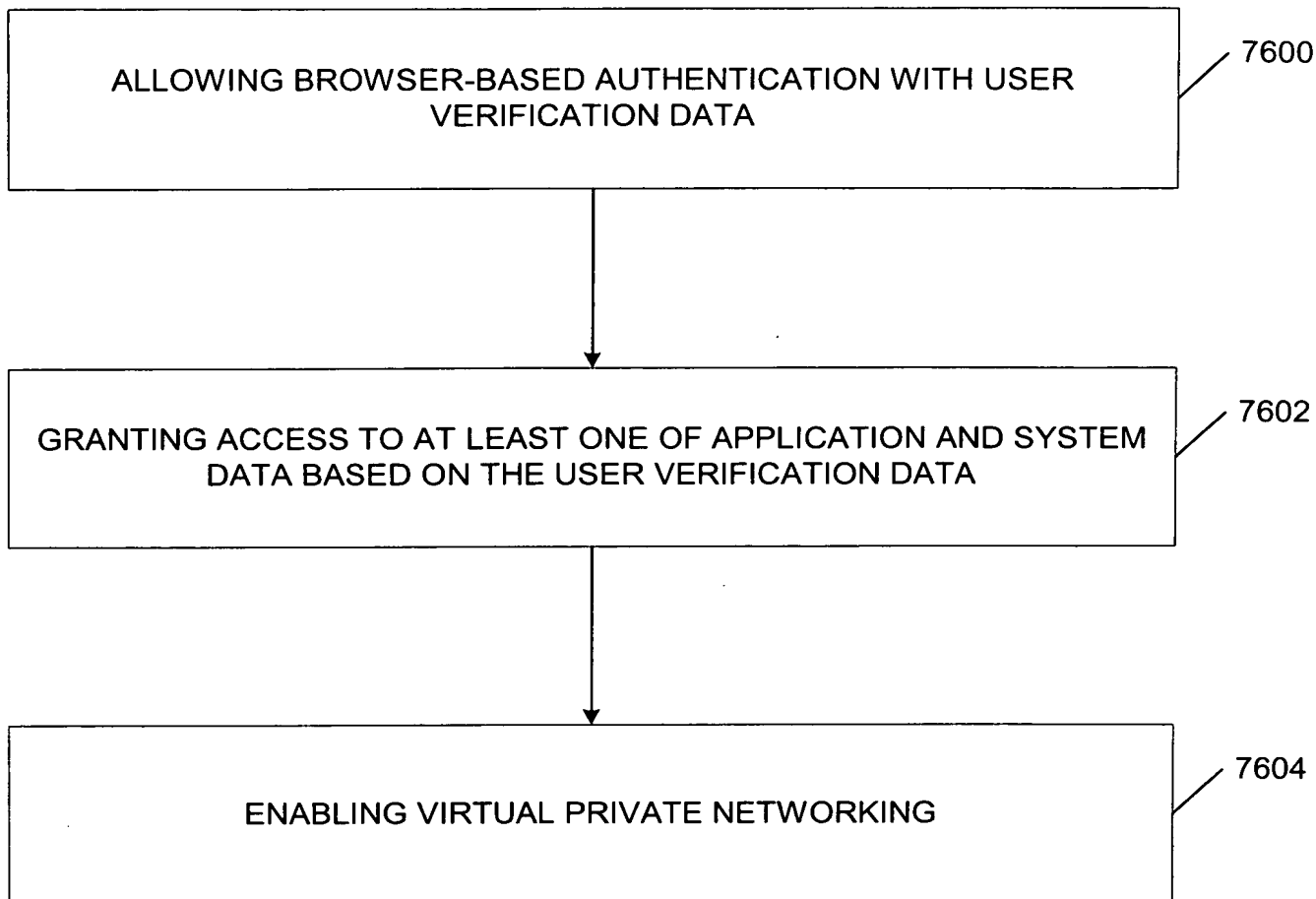


Figure 76

5314

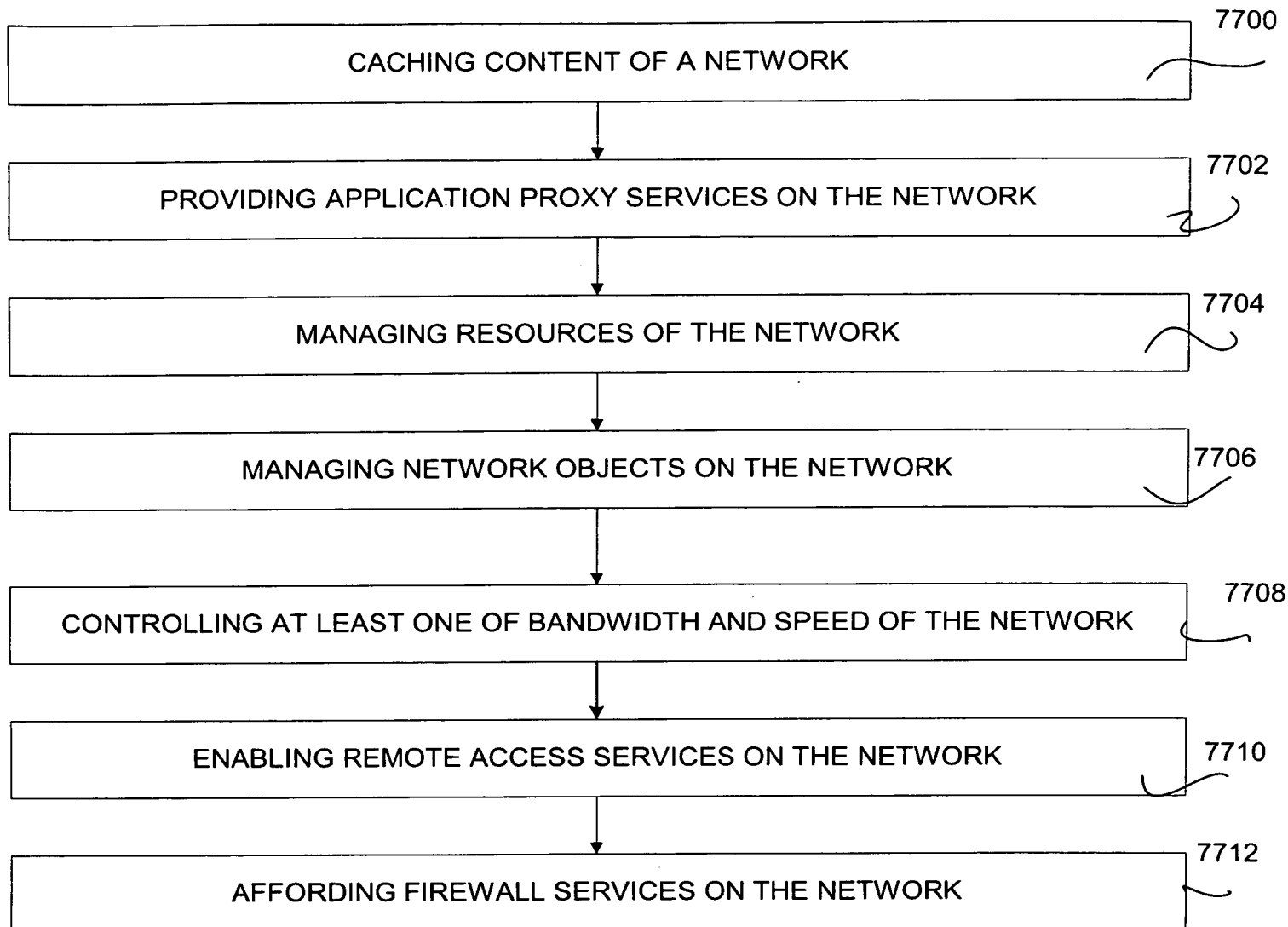


Figure 77

5316

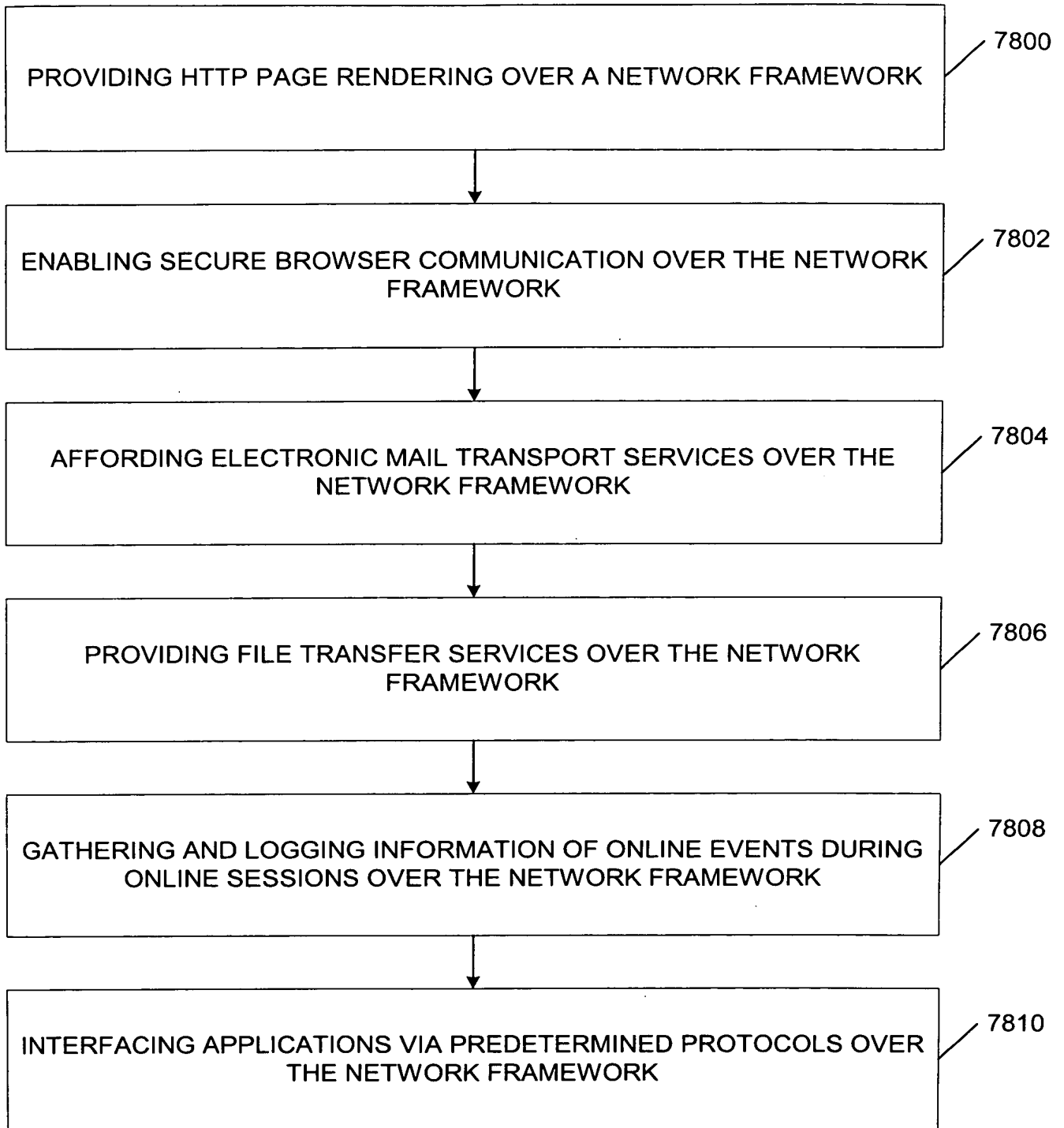


Figure 78

5318

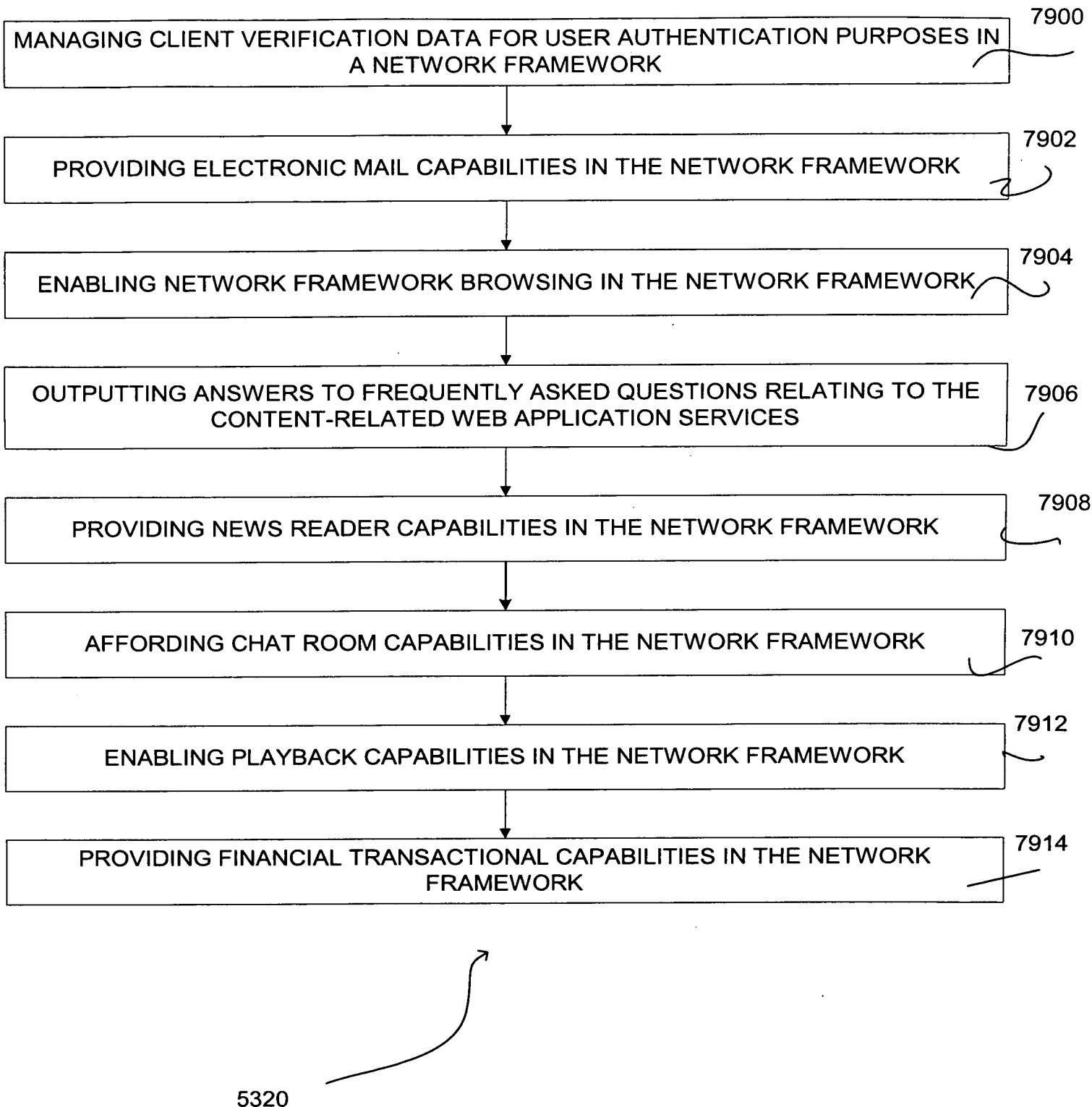


Figure 79

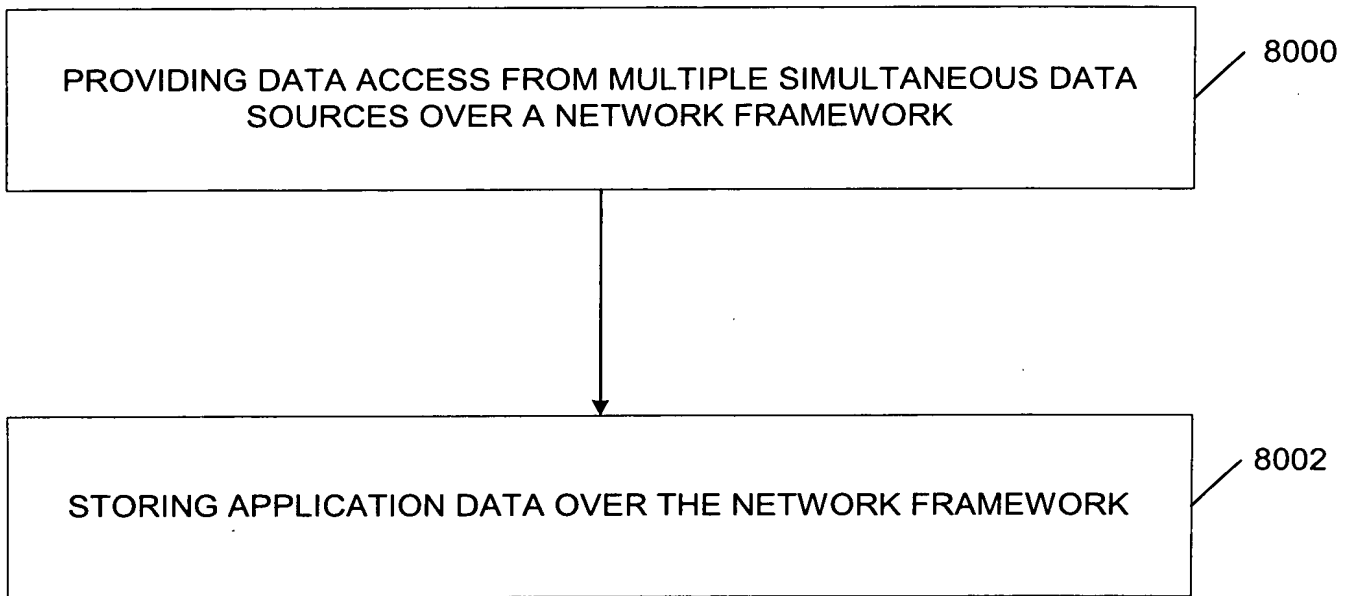
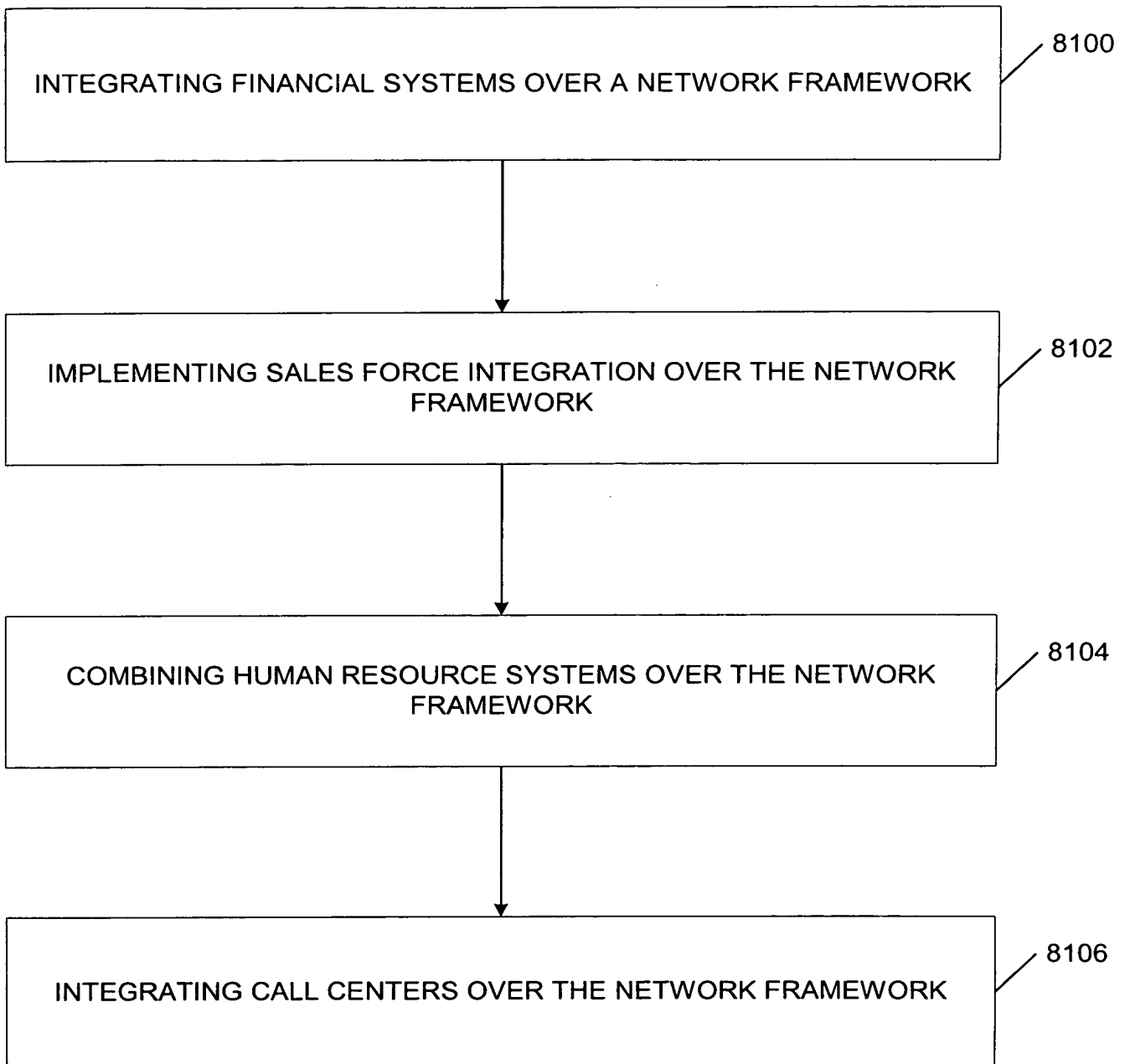


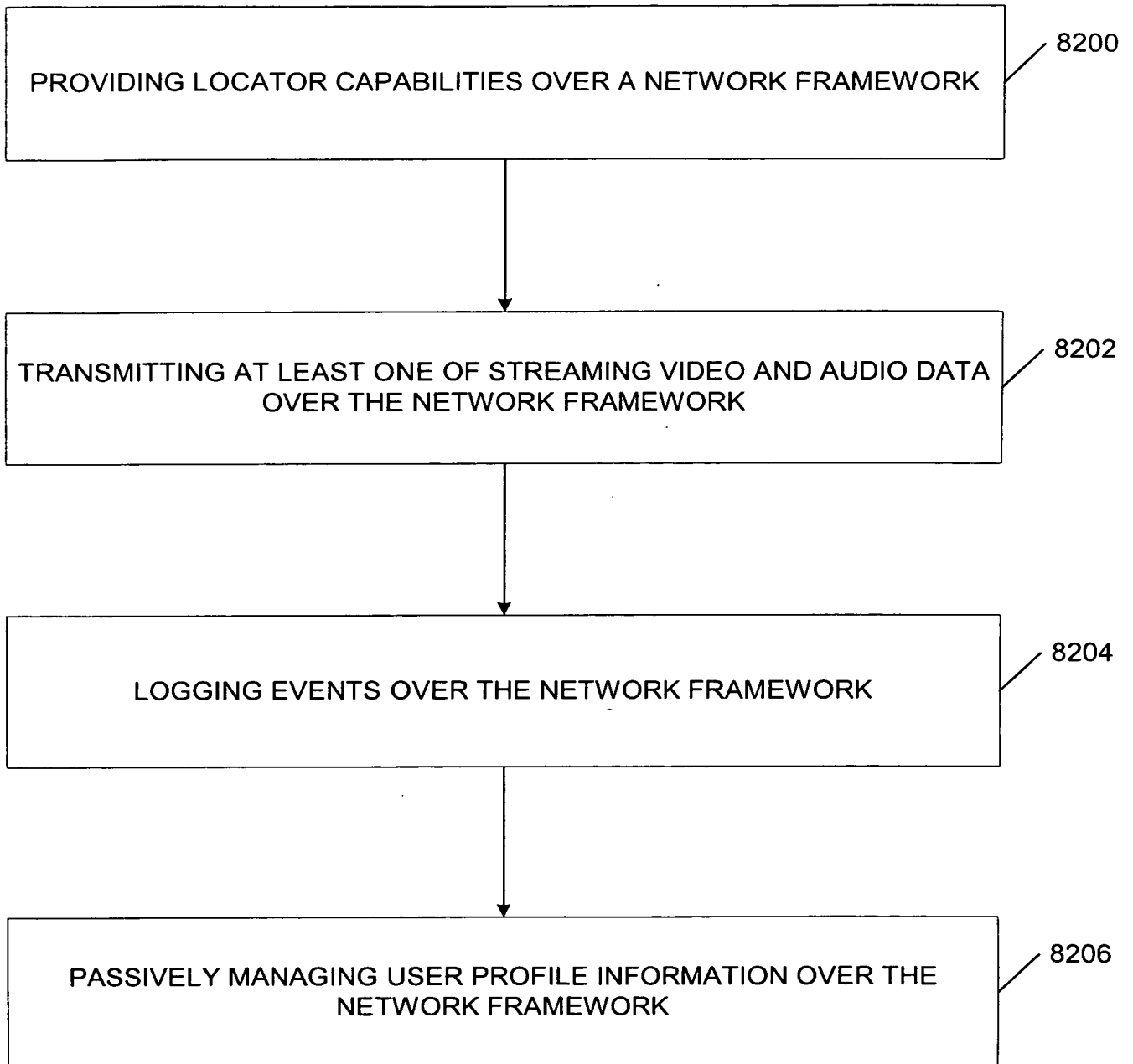
Figure 80

5324



5812

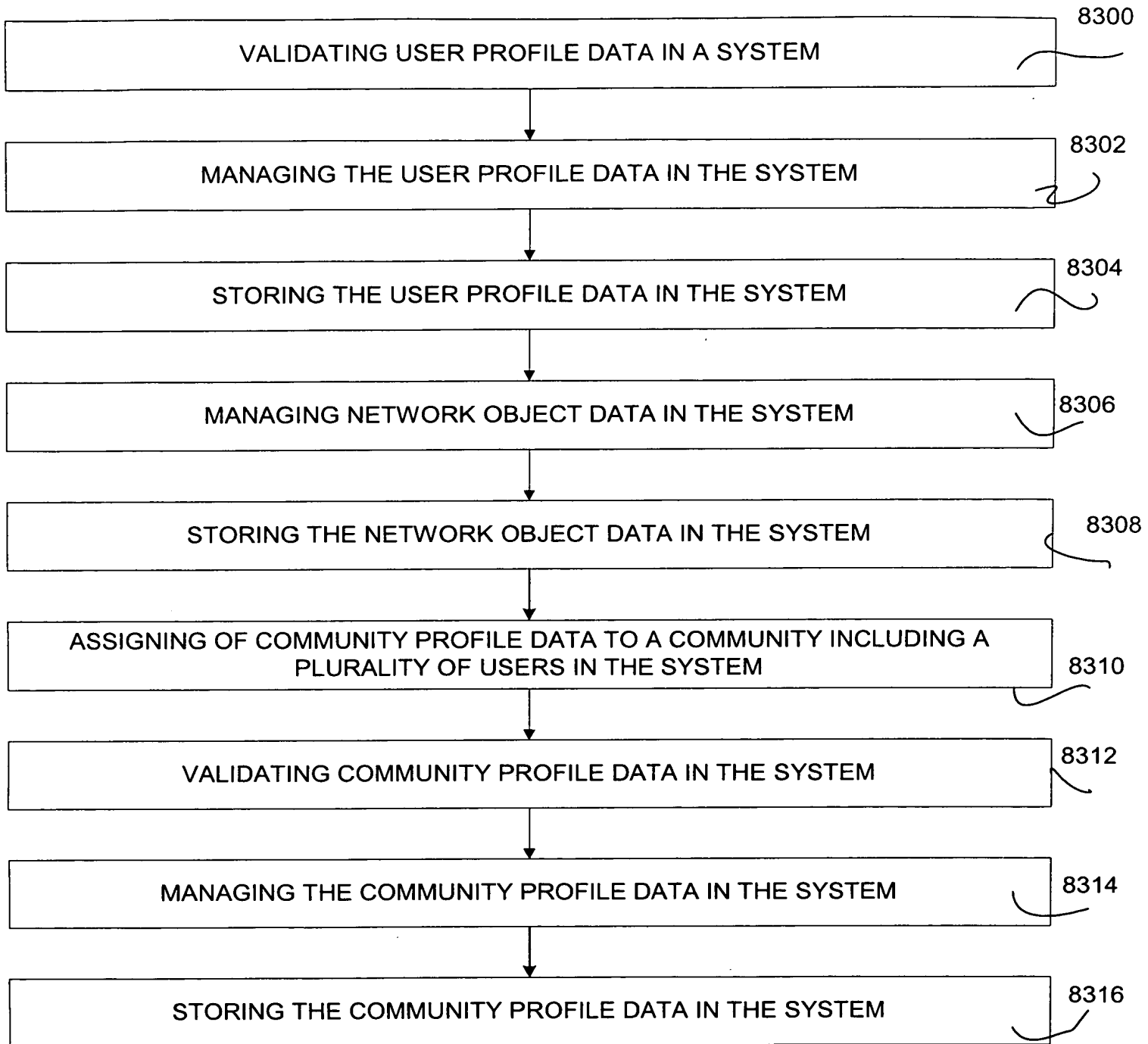
Figure 81



5326

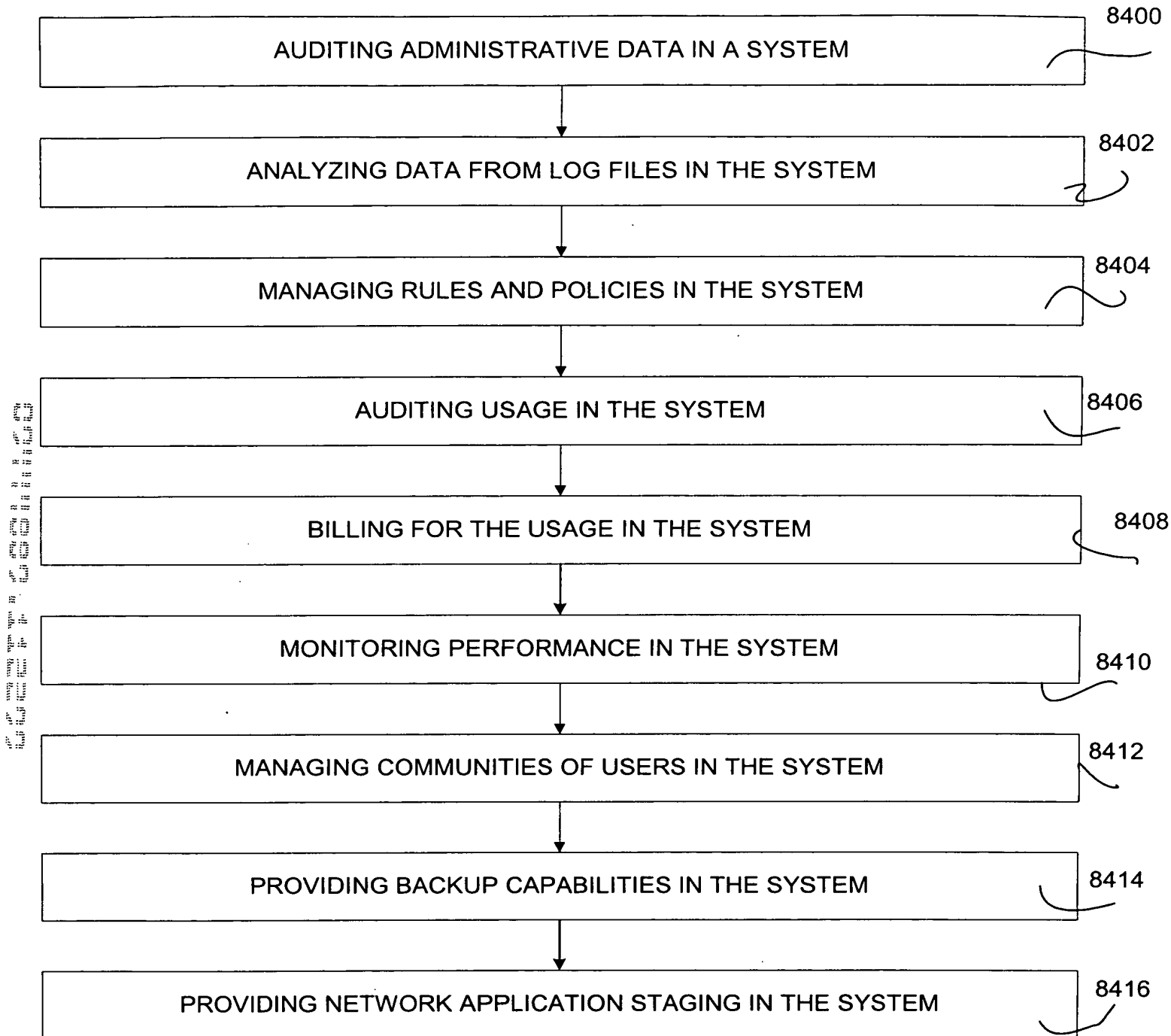
Figure 82

FIG. 83 is a flowchart illustrating a process for validating user profile data in a system, managing the user profile data in the system, storing the user profile data in the system, managing network object data in the system, storing the network object data in the system, assigning of community profile data to a community including a plurality of users in the system, validating community profile data in the system, managing the community profile data in the system, and storing the community profile data in the system.



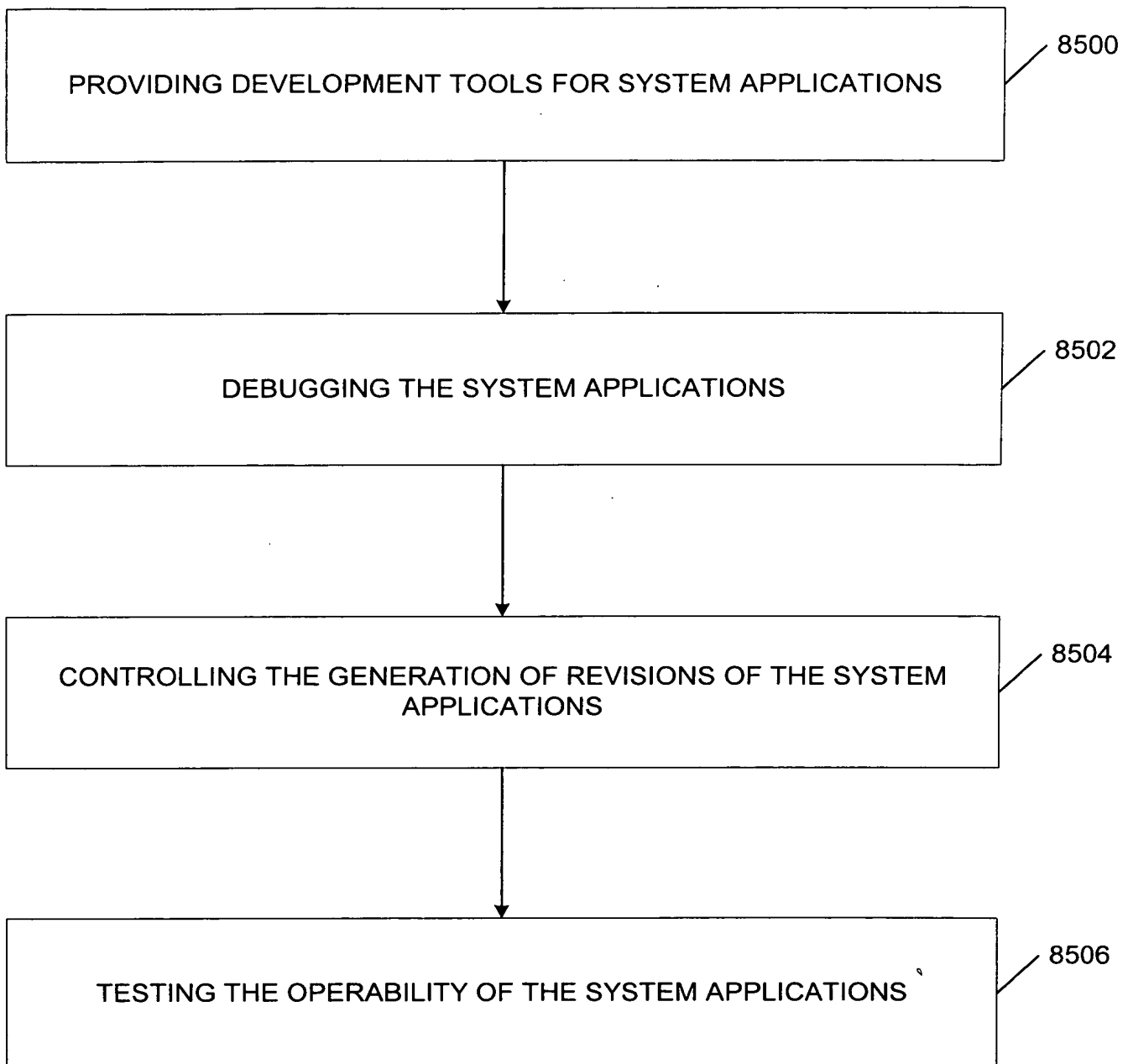
5328

Figure 83



5330

Figure 84



5332

Figure 85

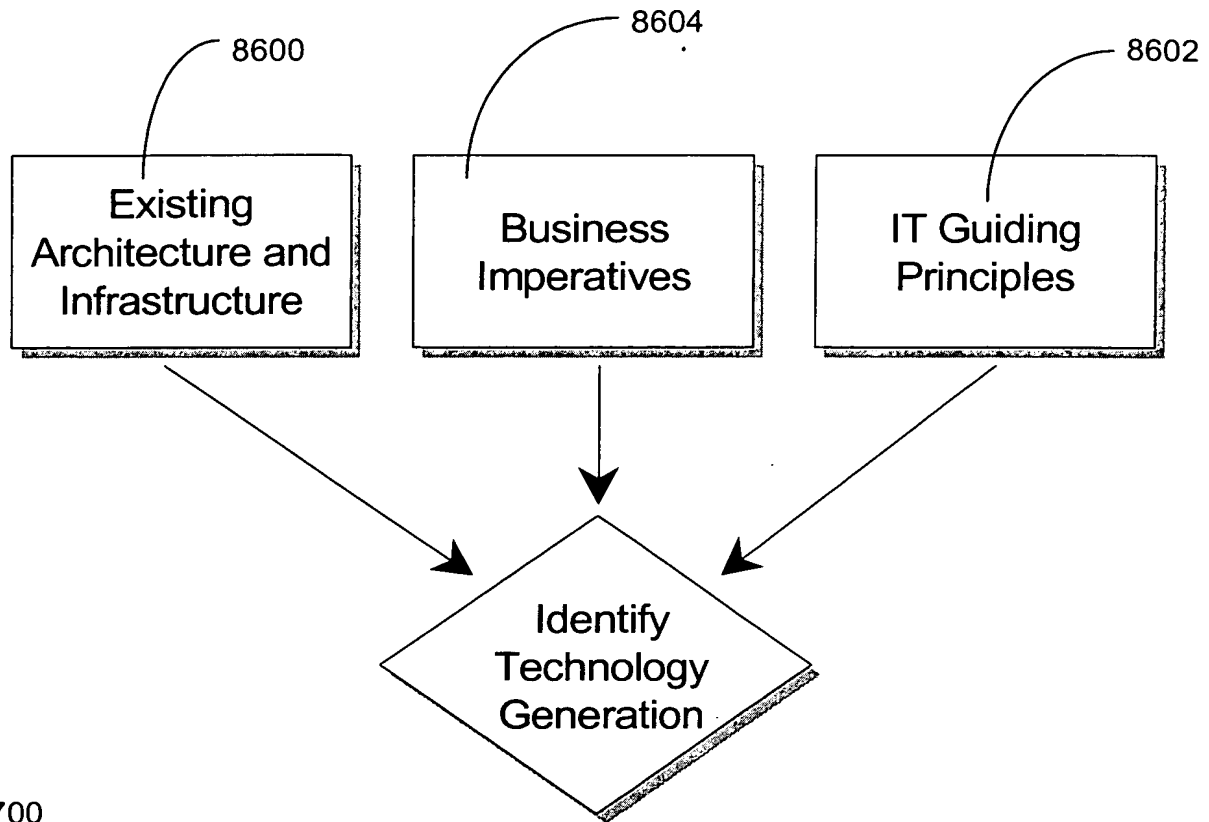


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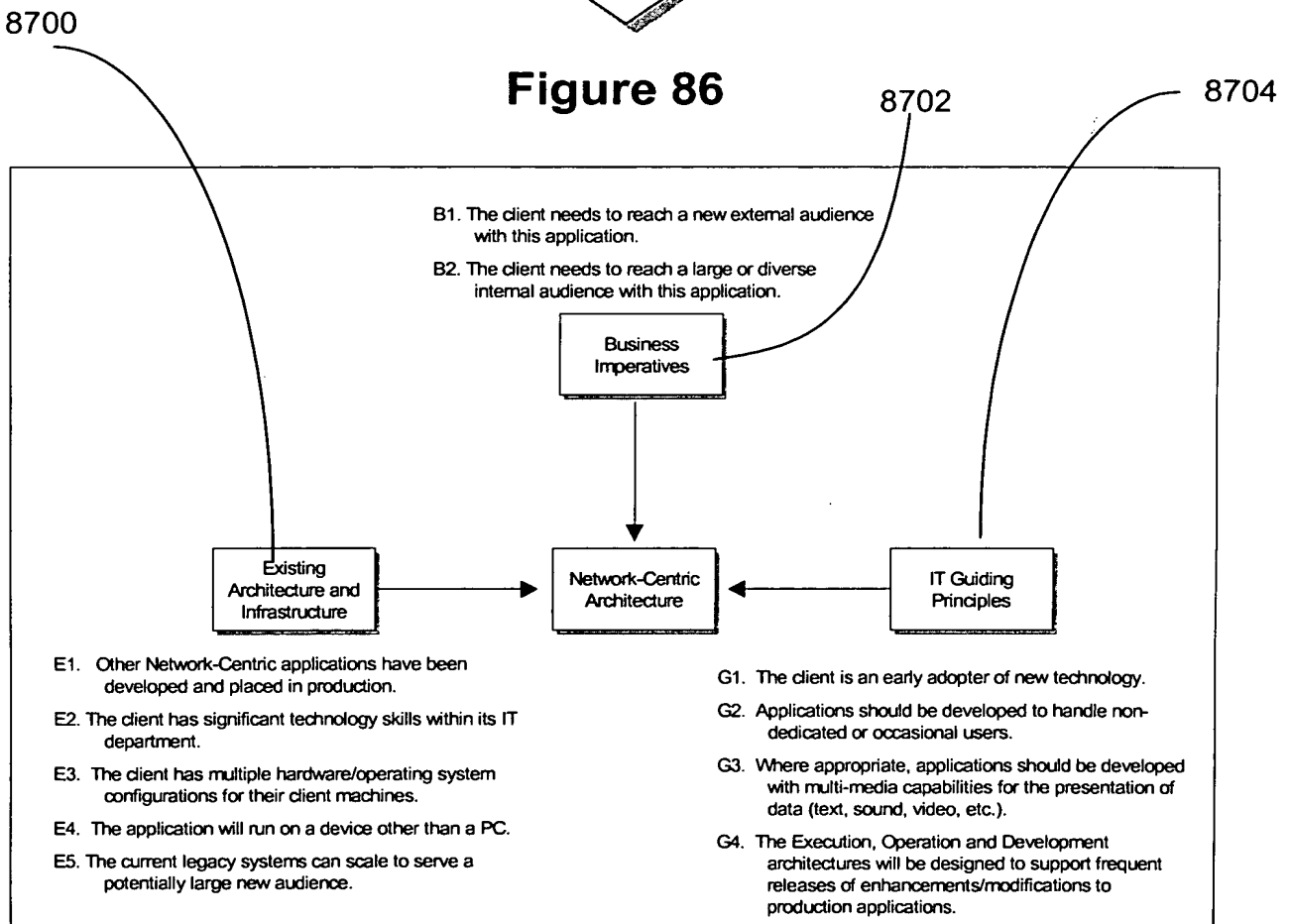


Figure 87

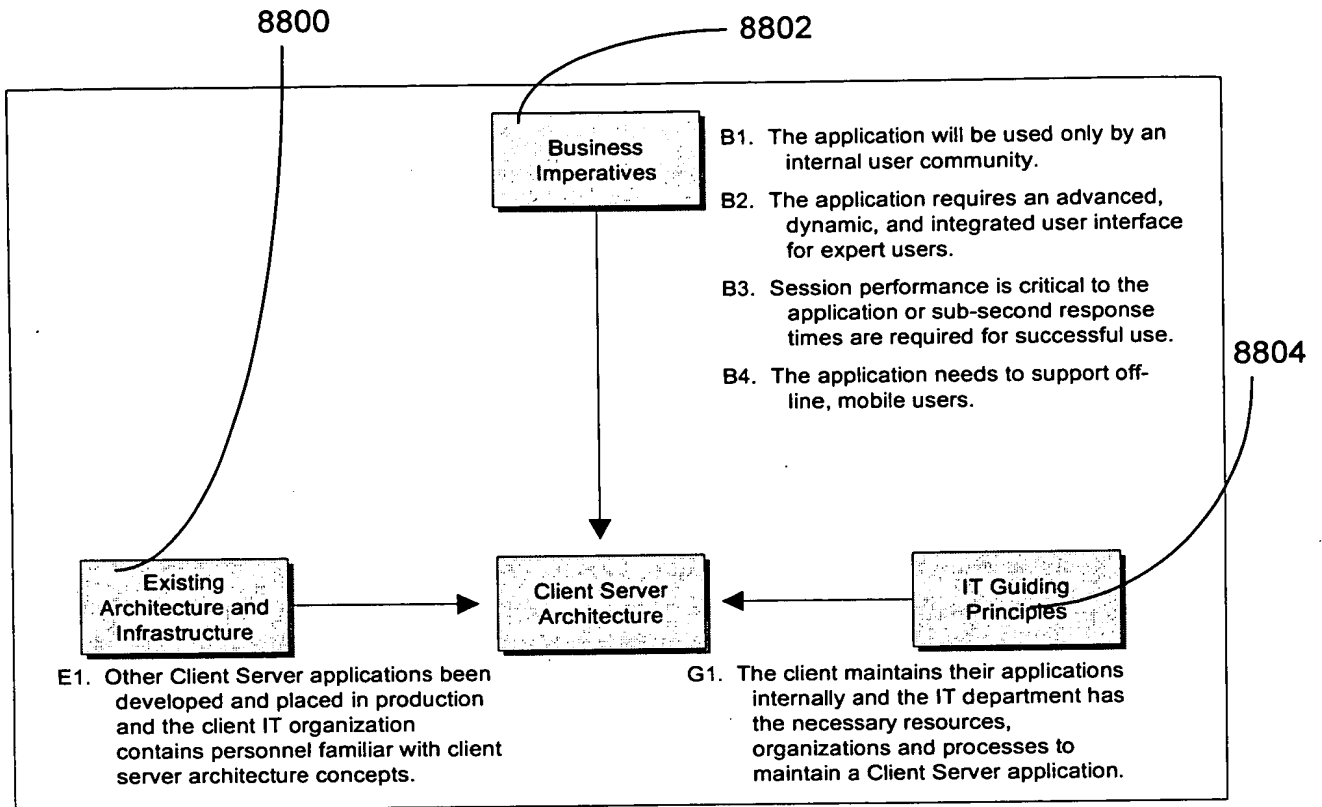


Figure 88

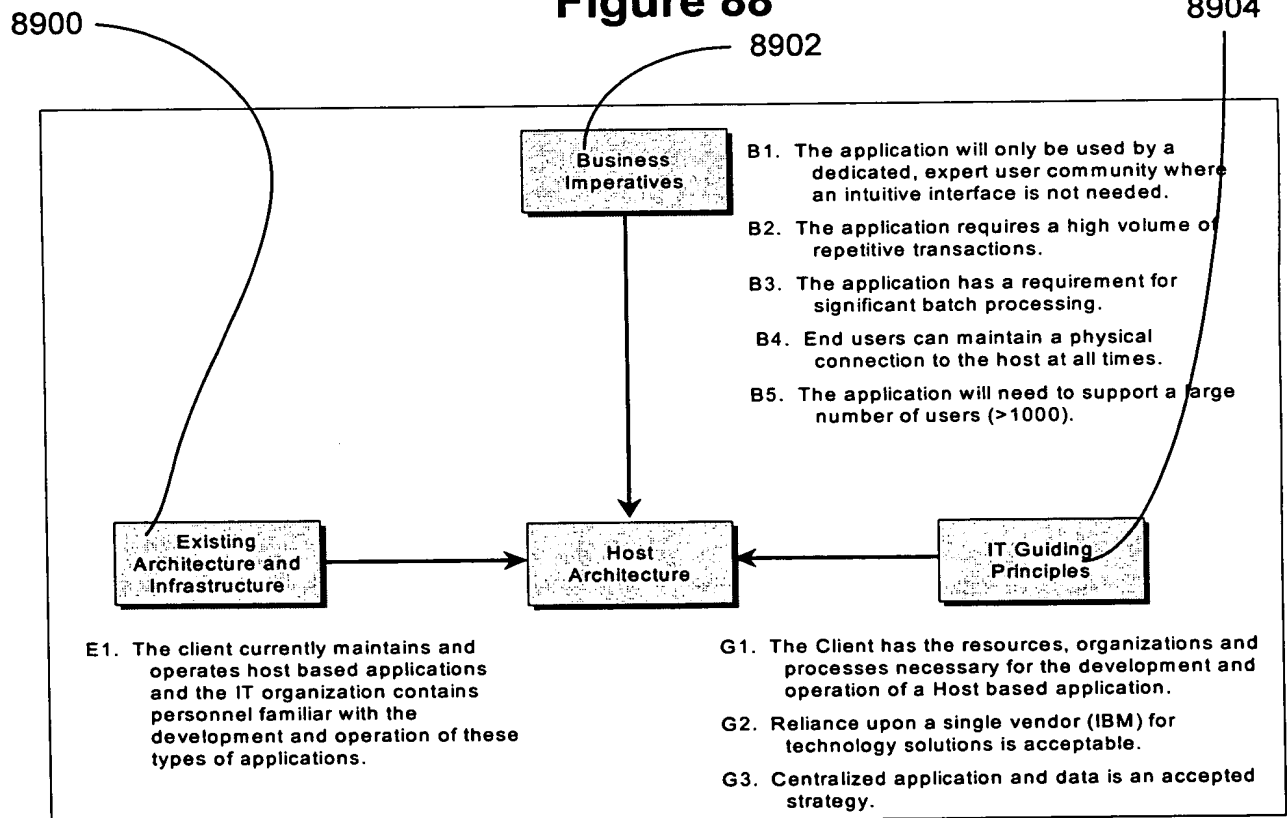


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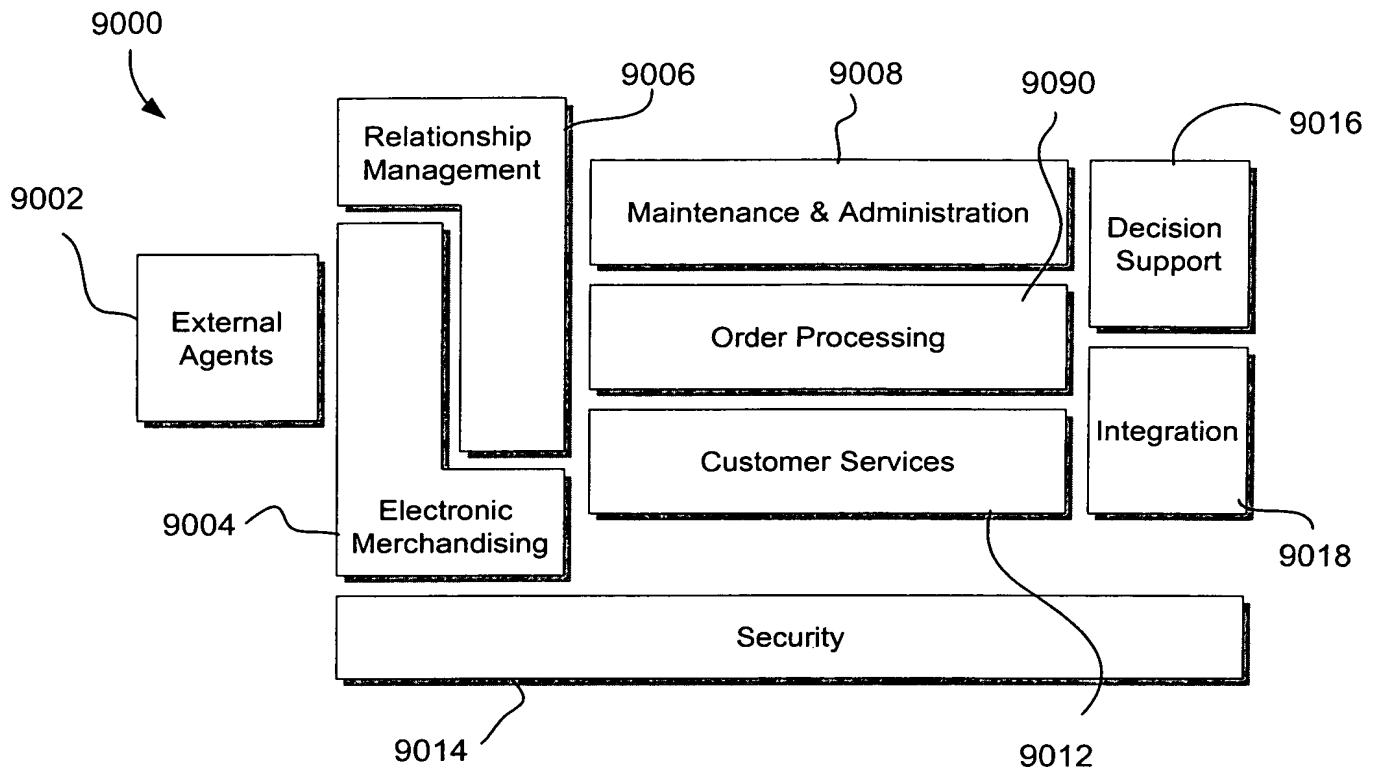


Figure 90

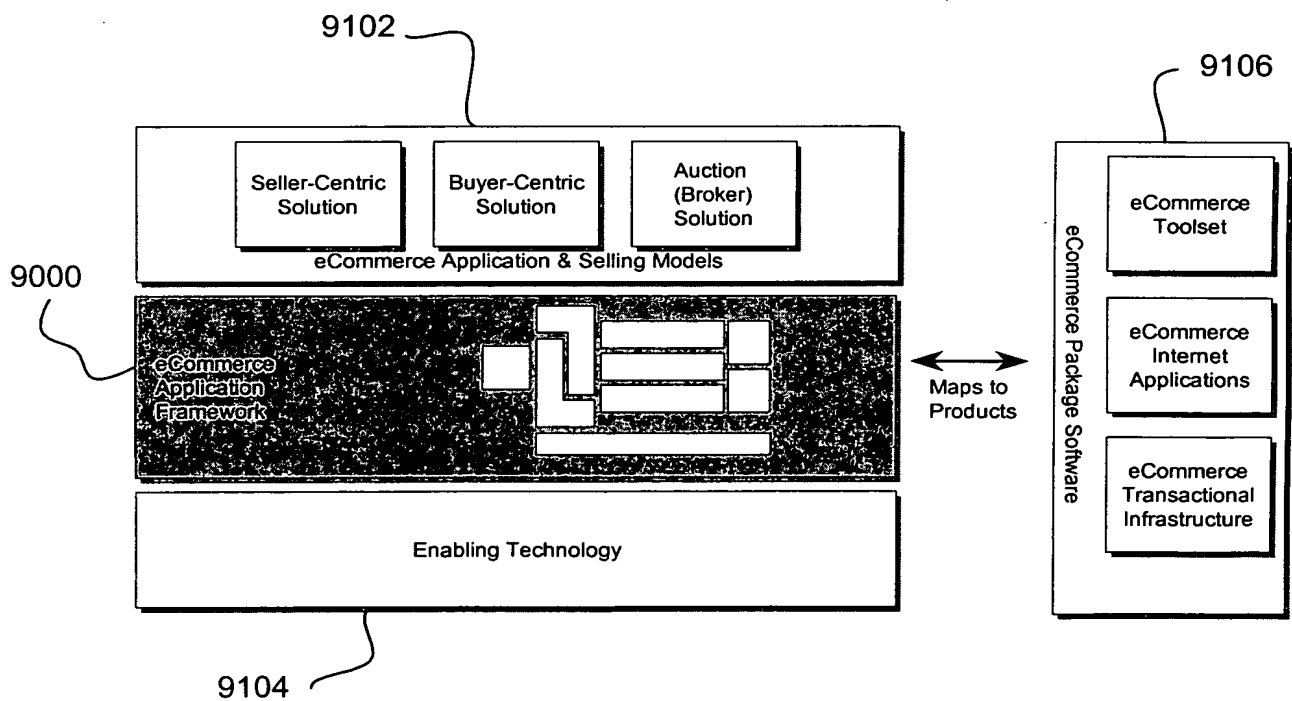


Figure 91

9200

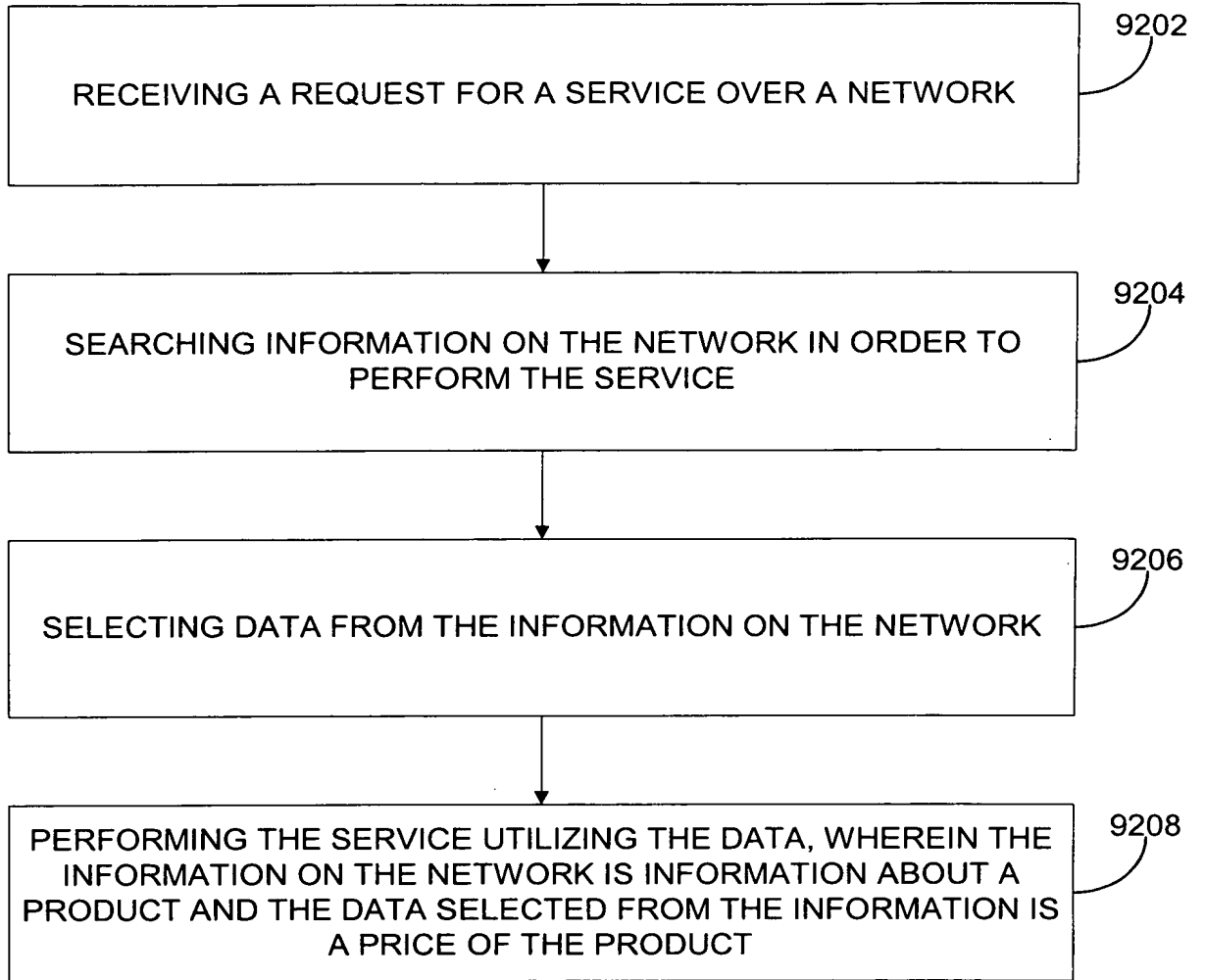
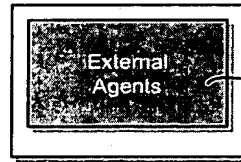


Figure 92

1002



9300

Figure 93

9004

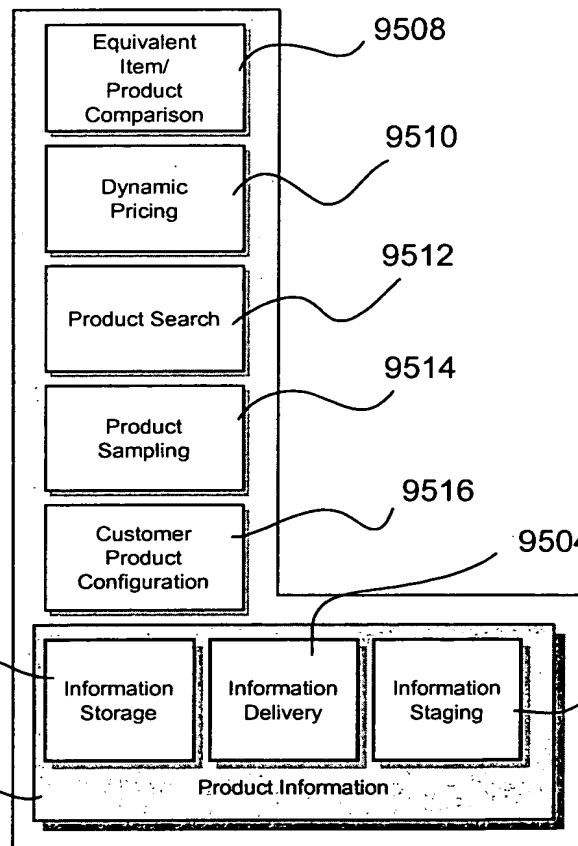


Figure 95

9400

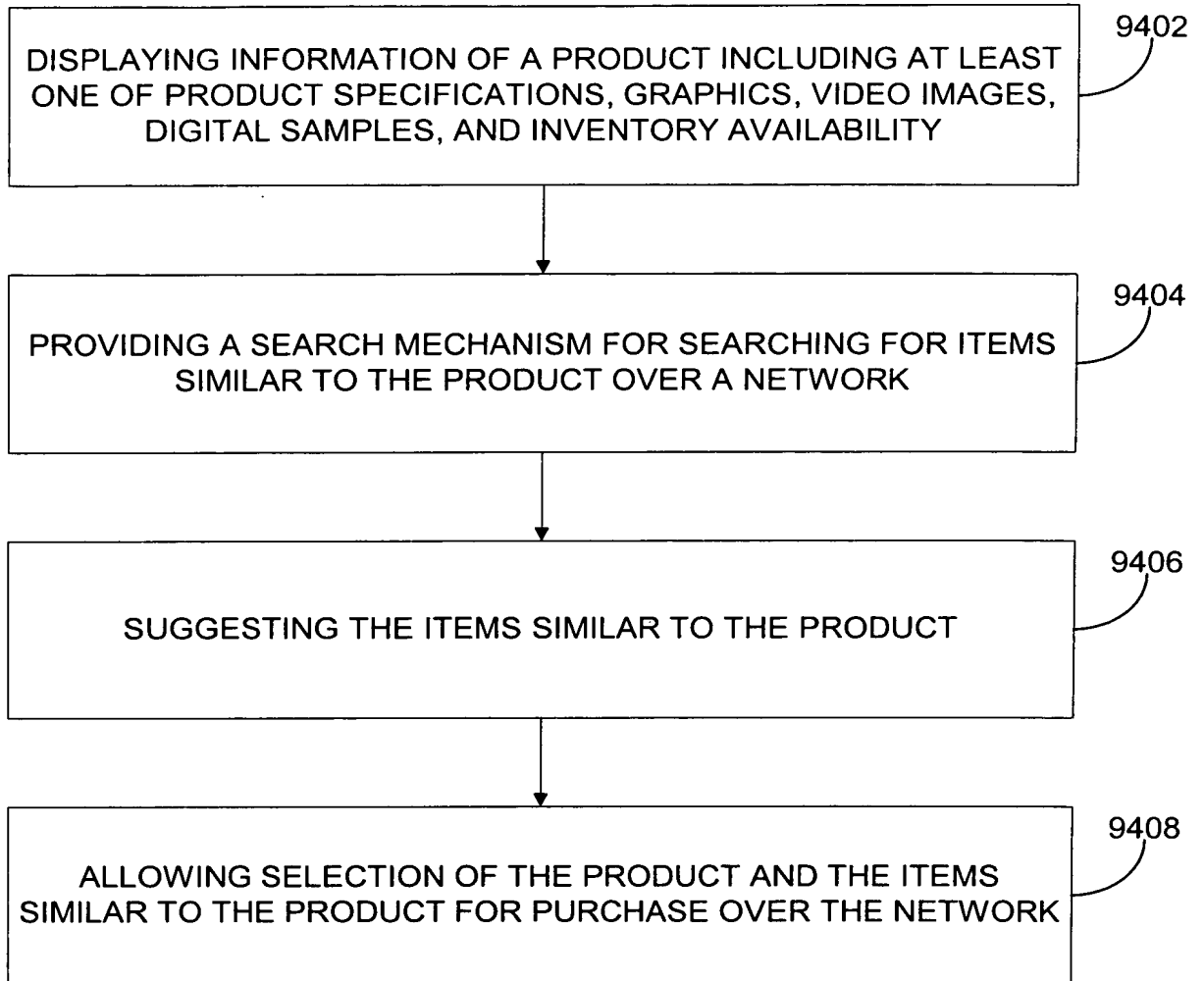


Figure 94

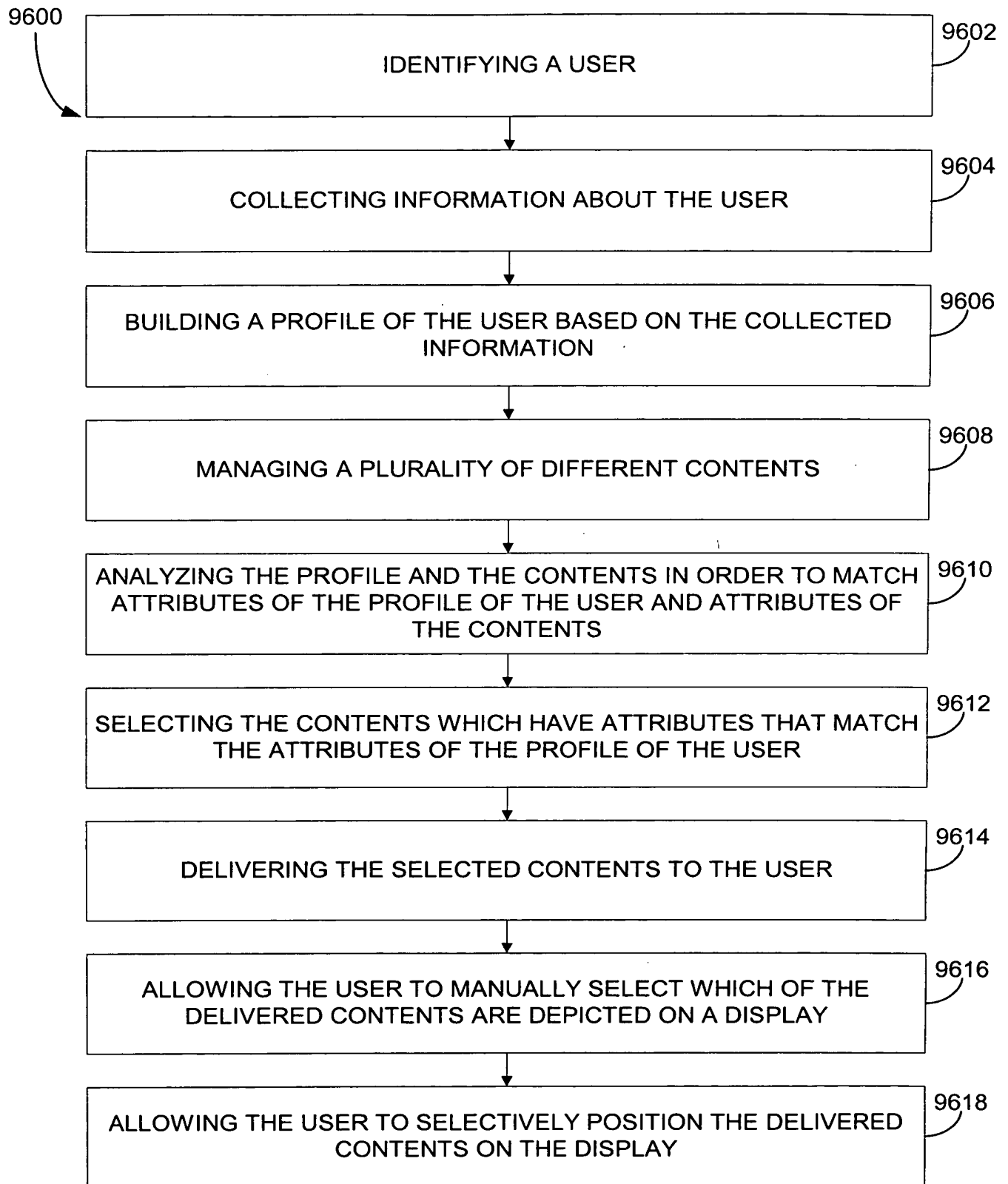


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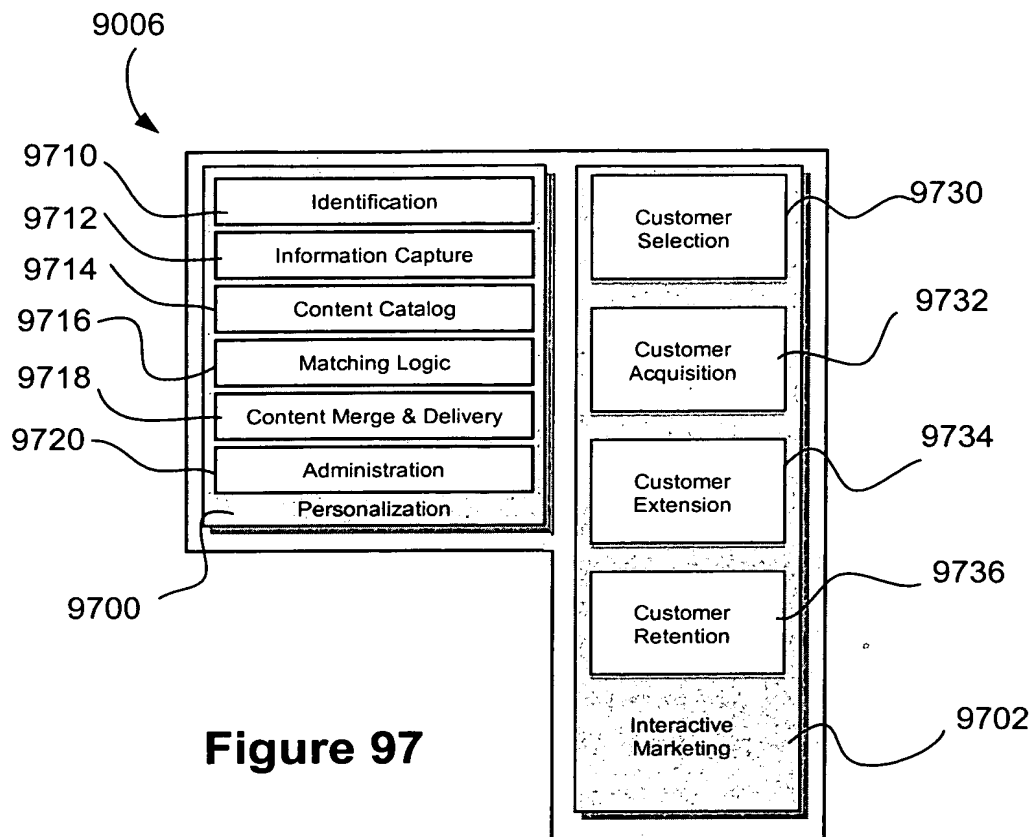


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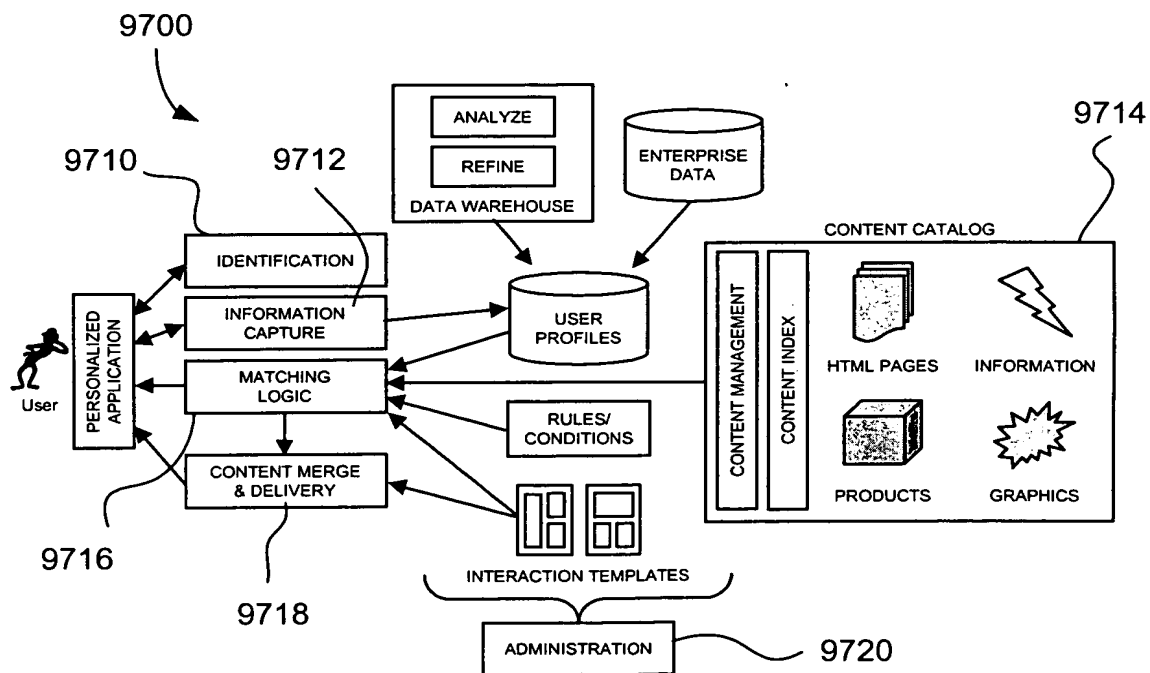


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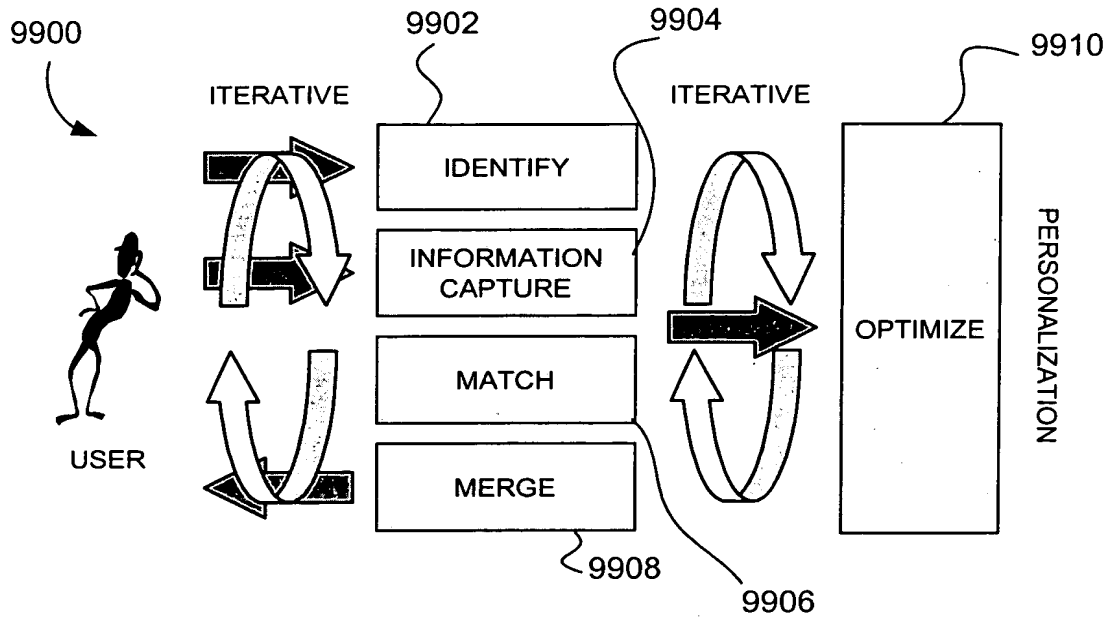


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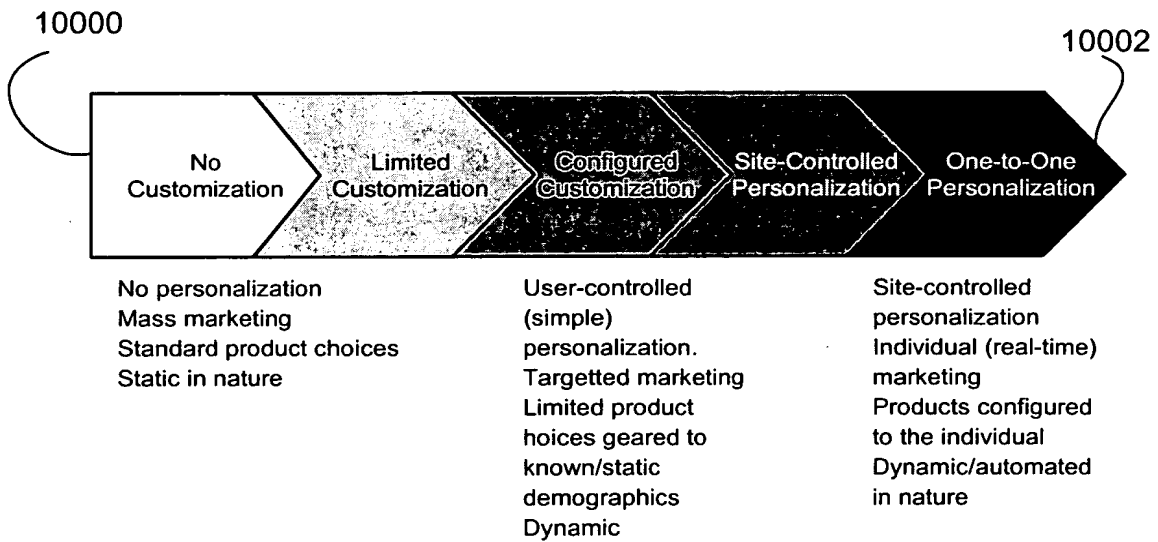


Figure 100

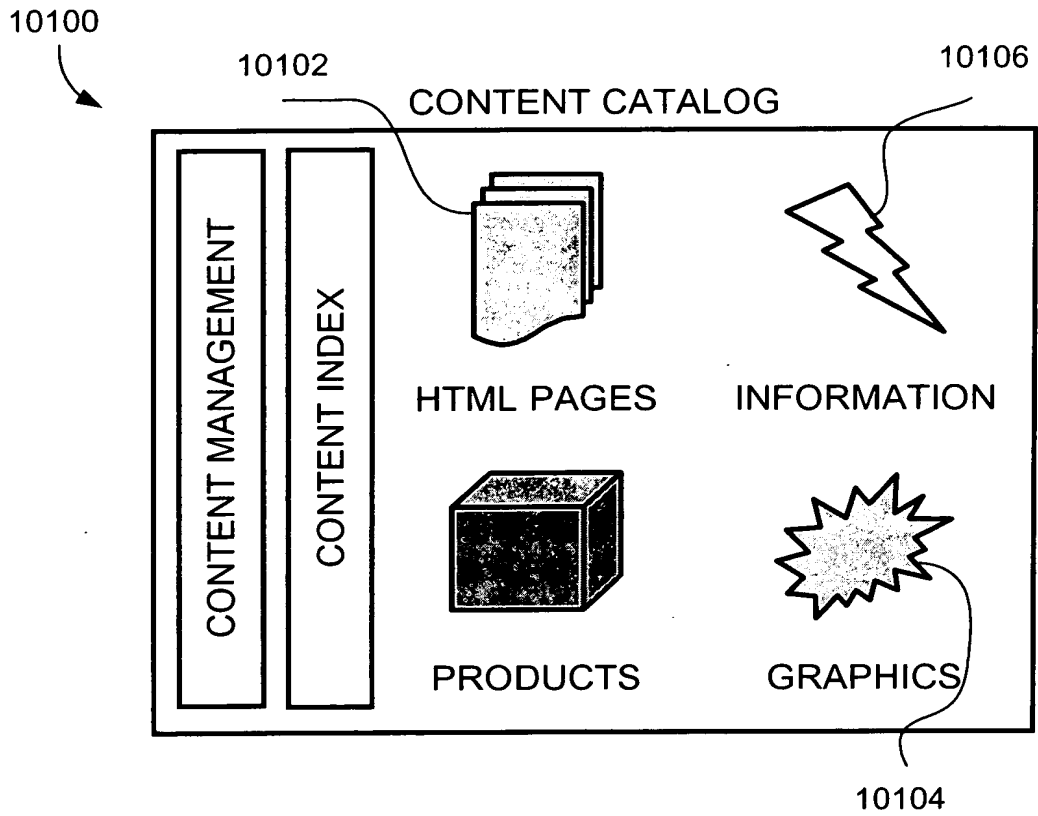


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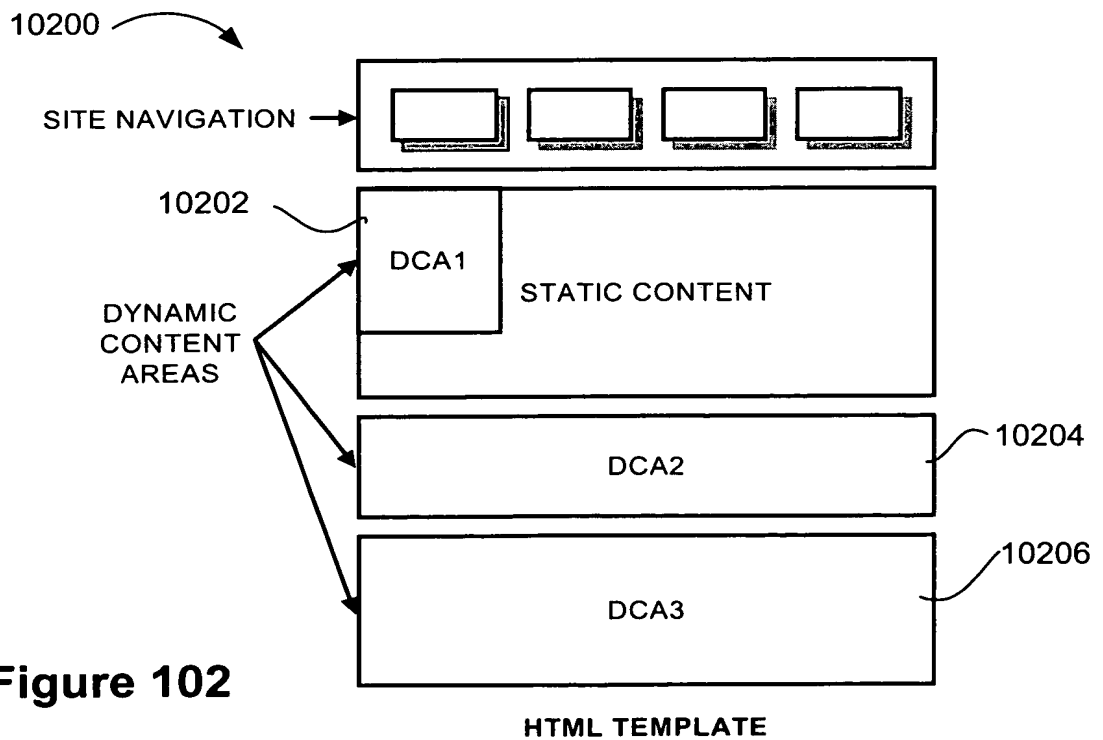


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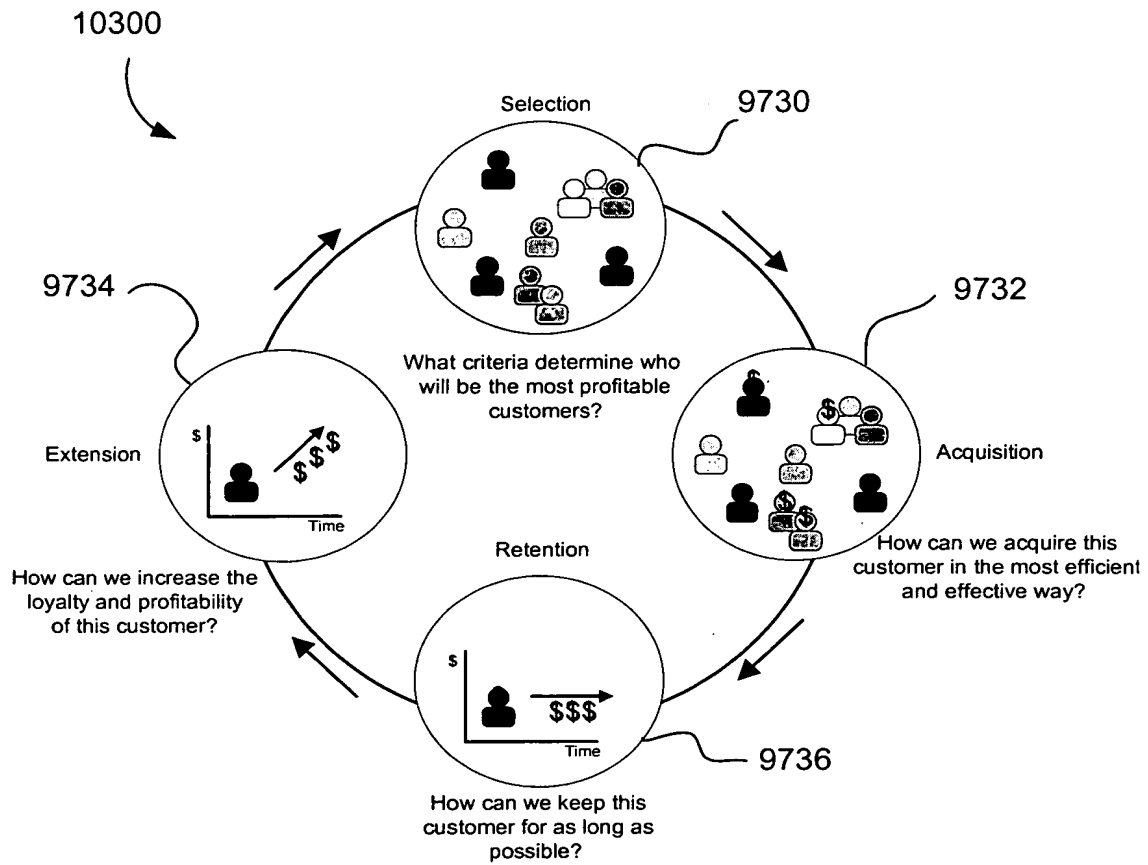


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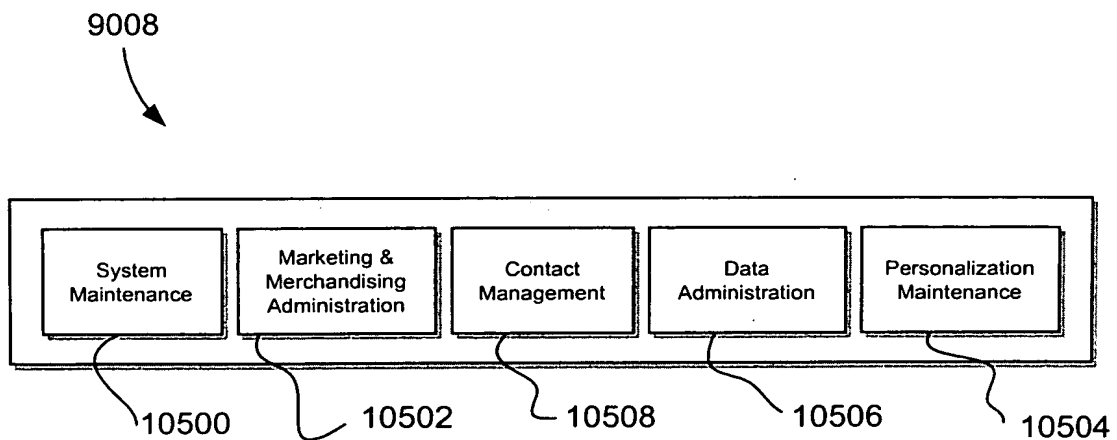


Figure 105

10400

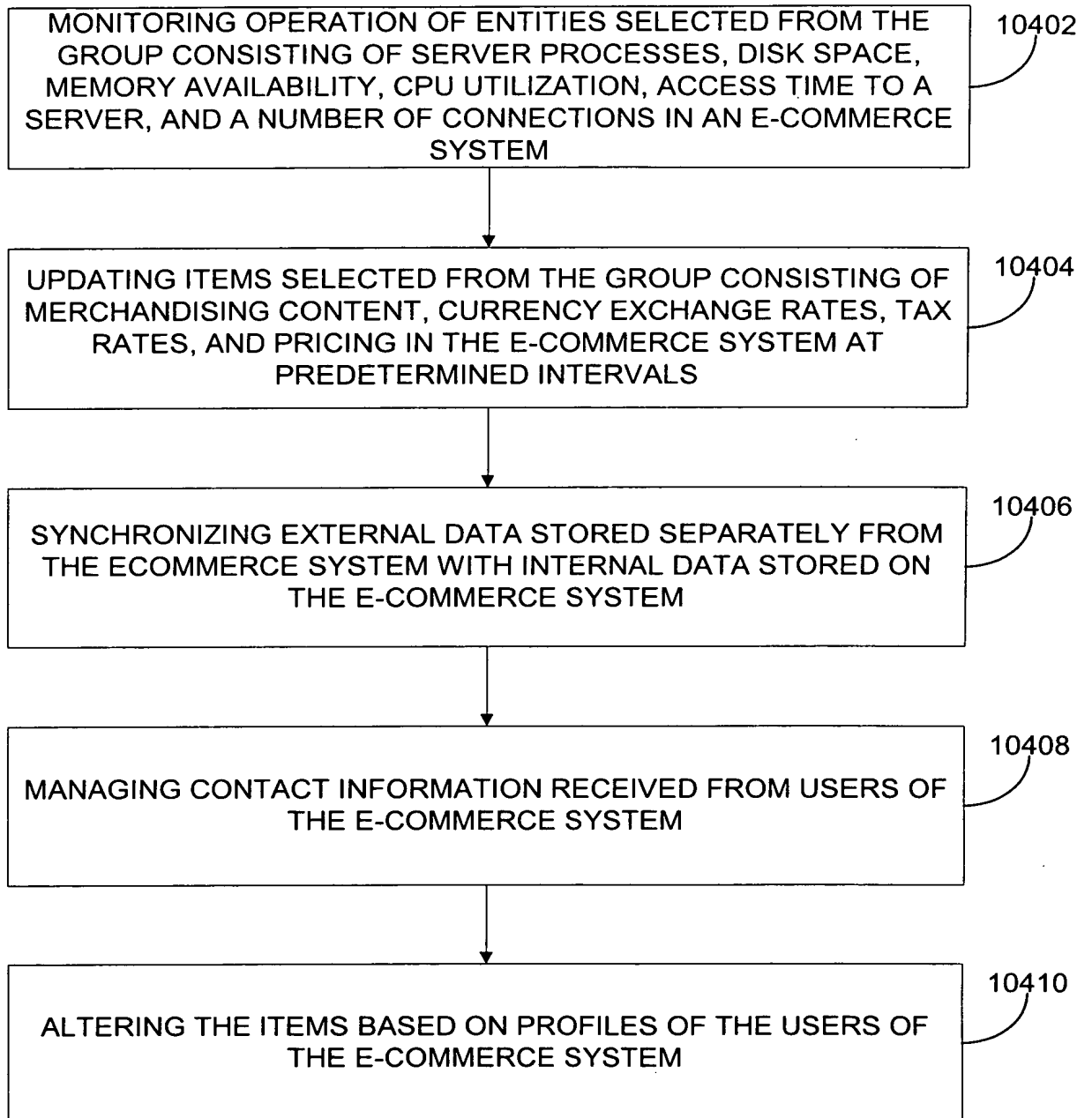


Figure 104

9010

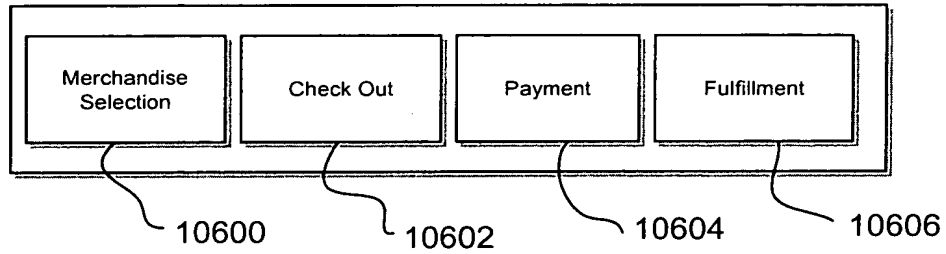


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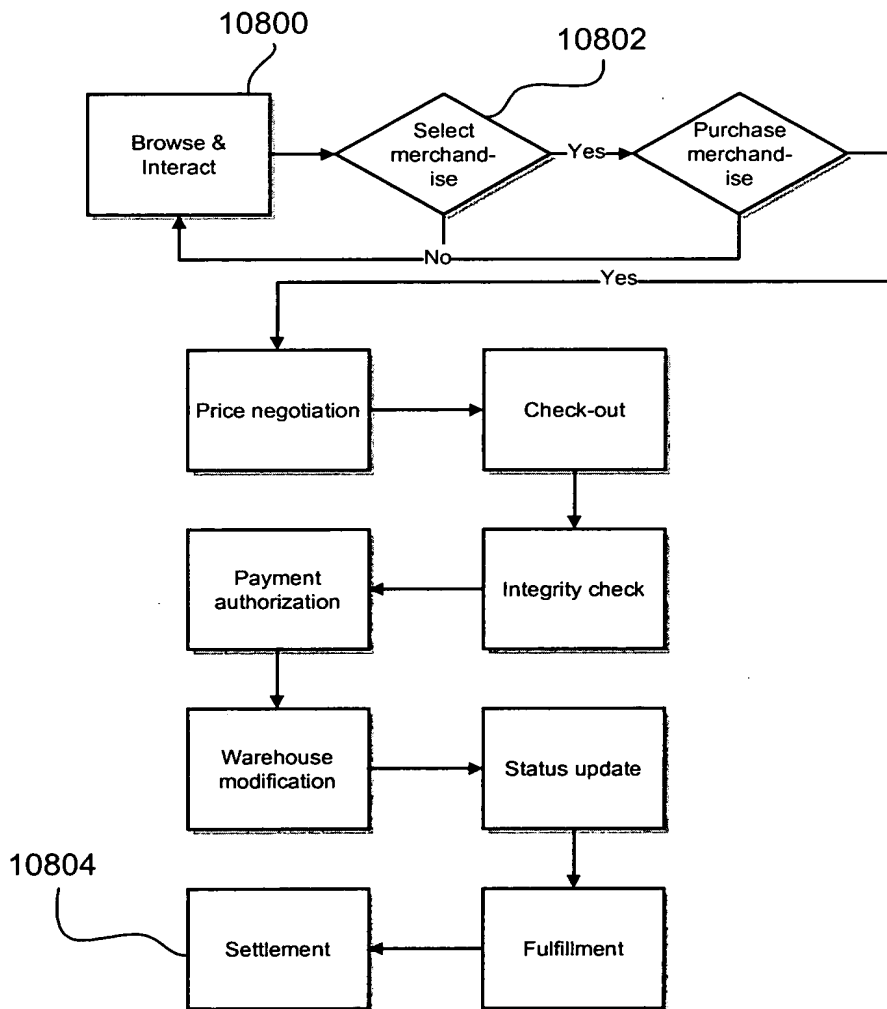


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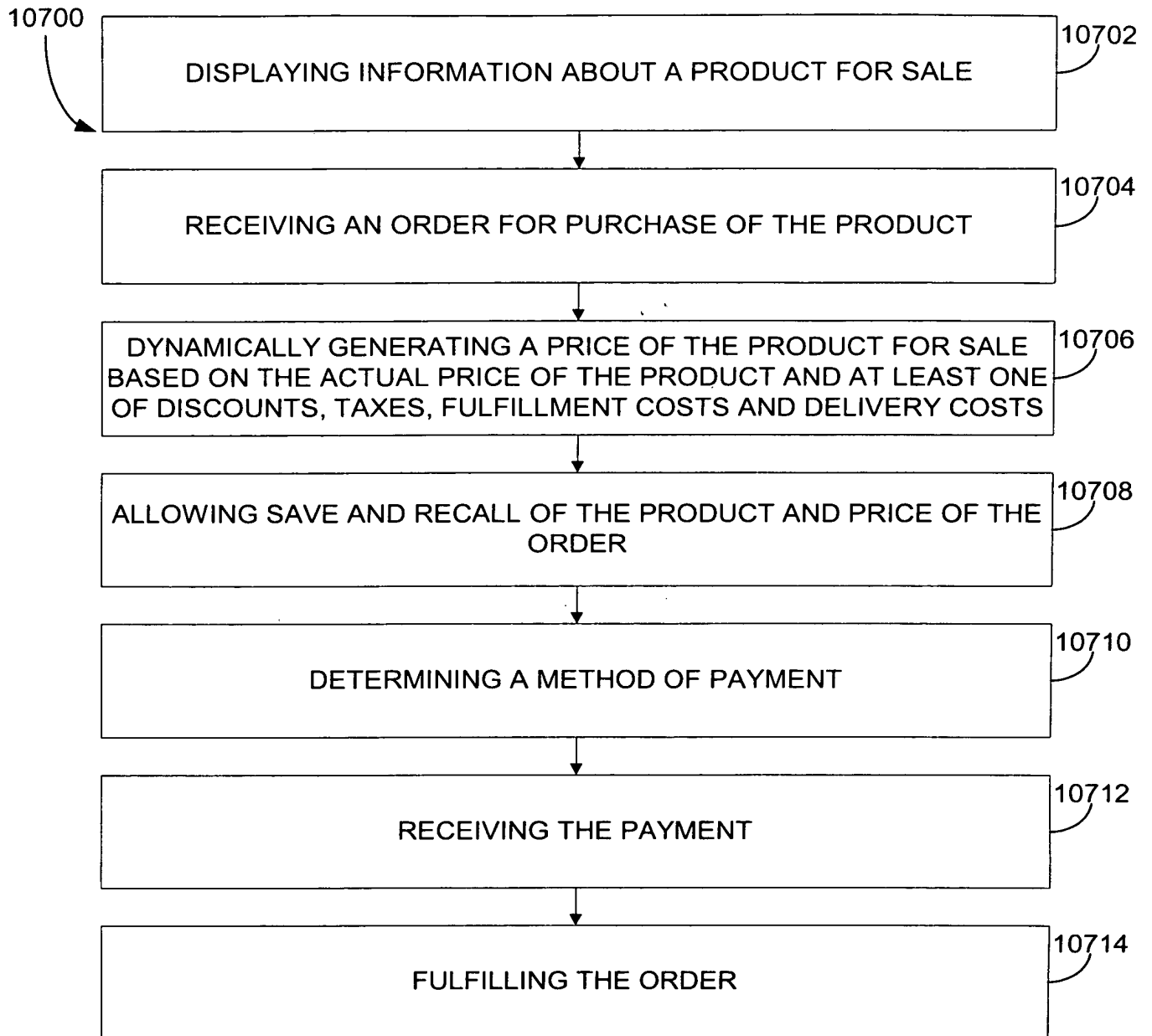


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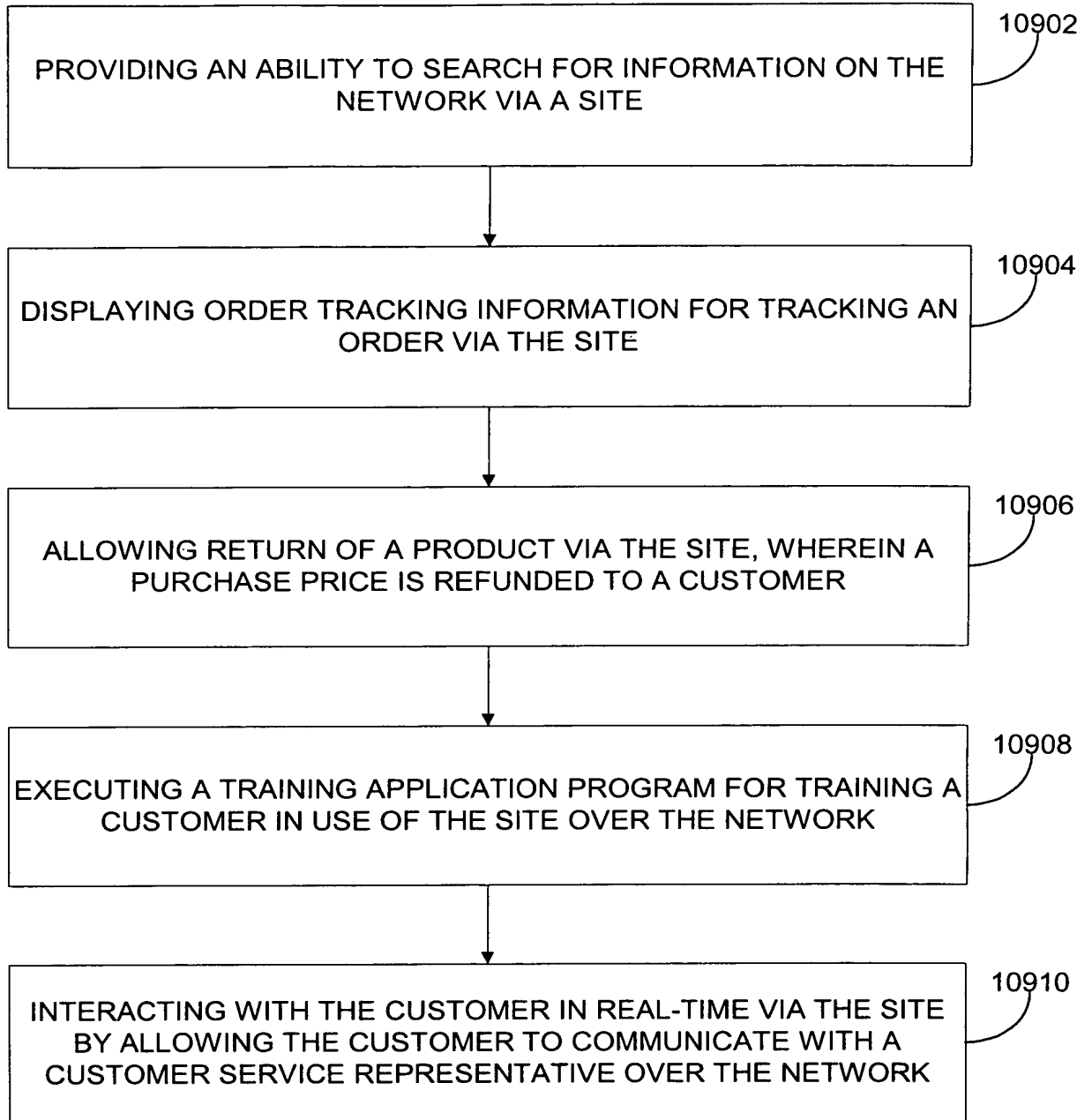


Figure 109

9012

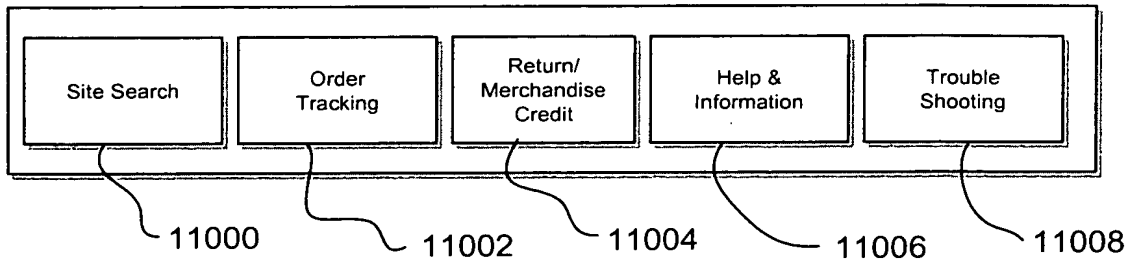


Figure 110

9014

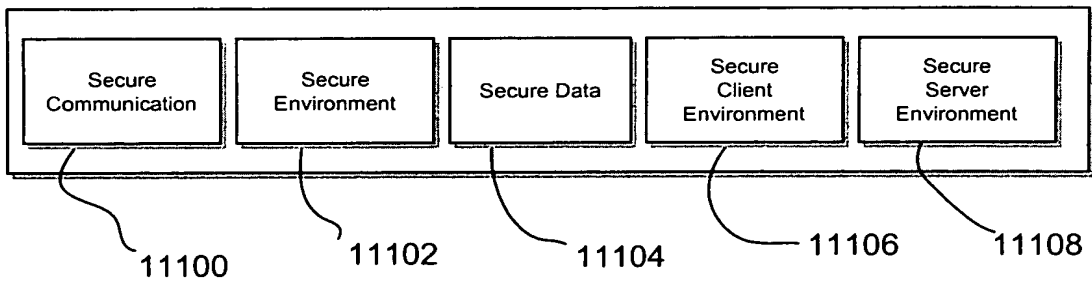


Figure 111

11200

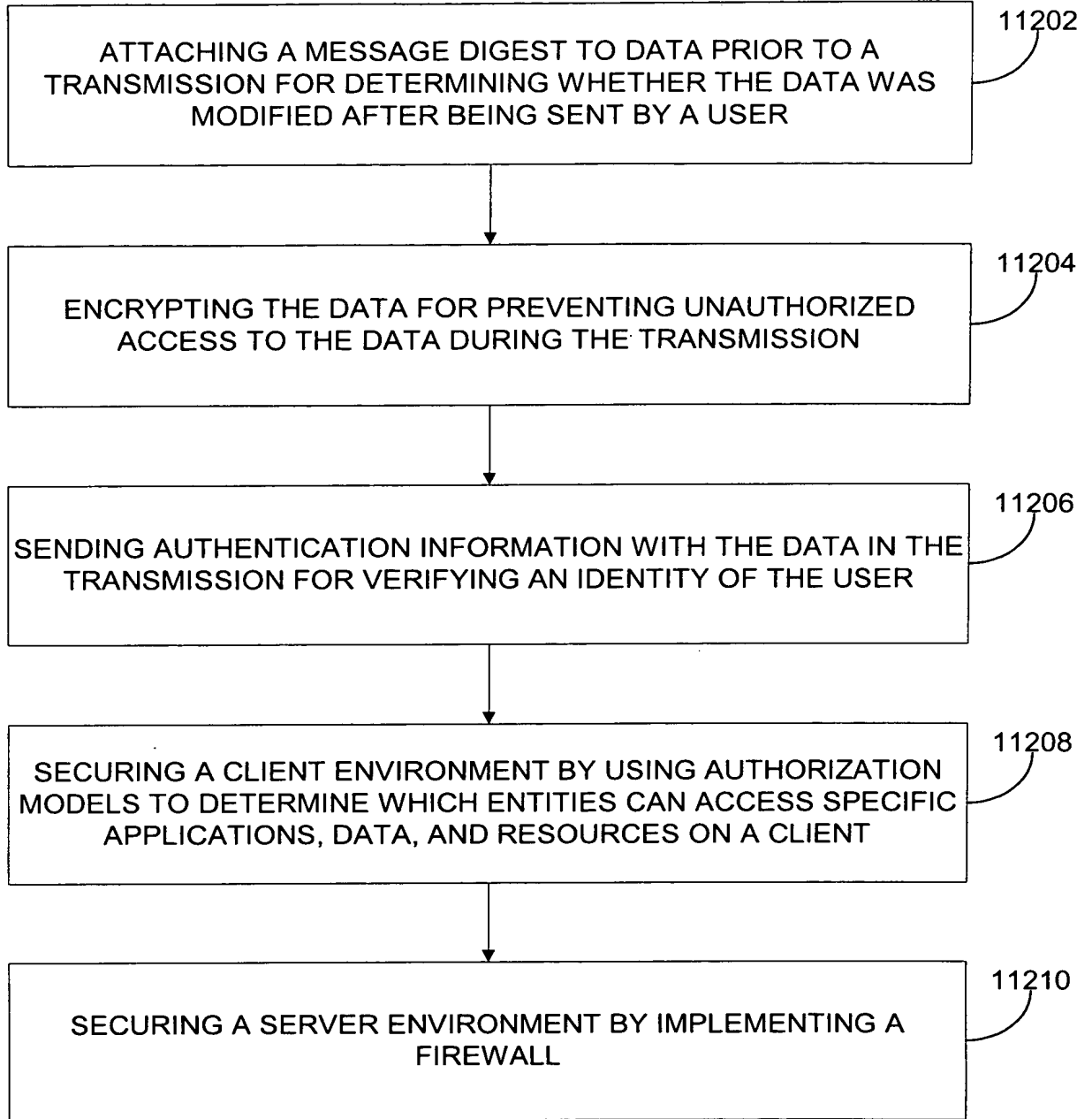


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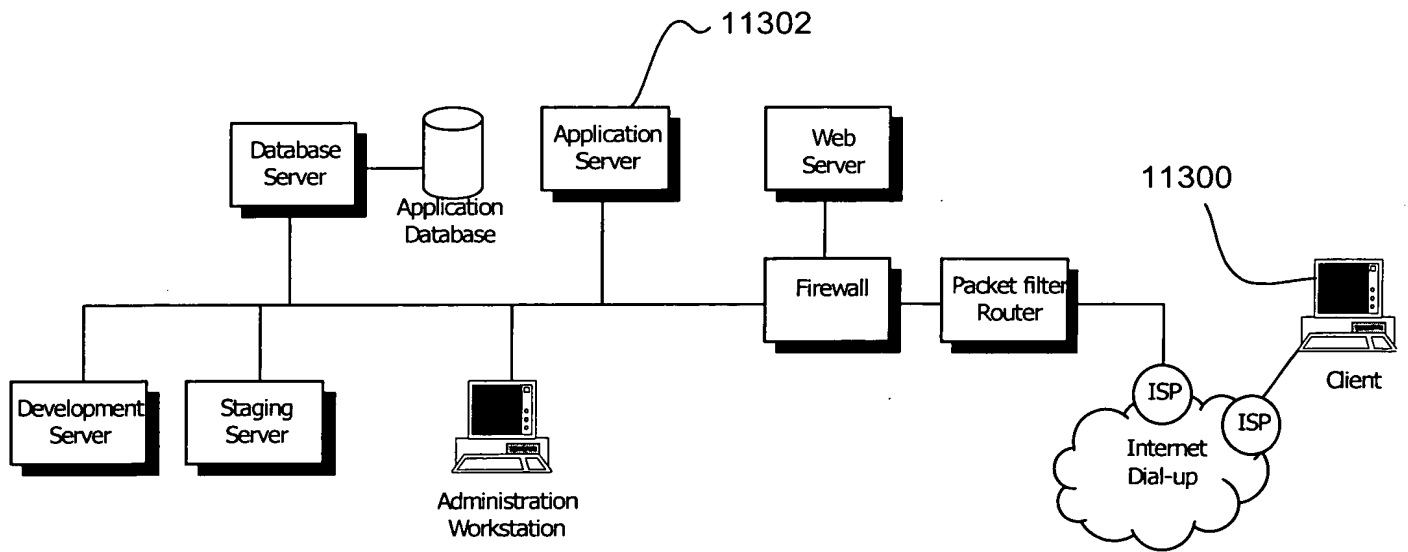


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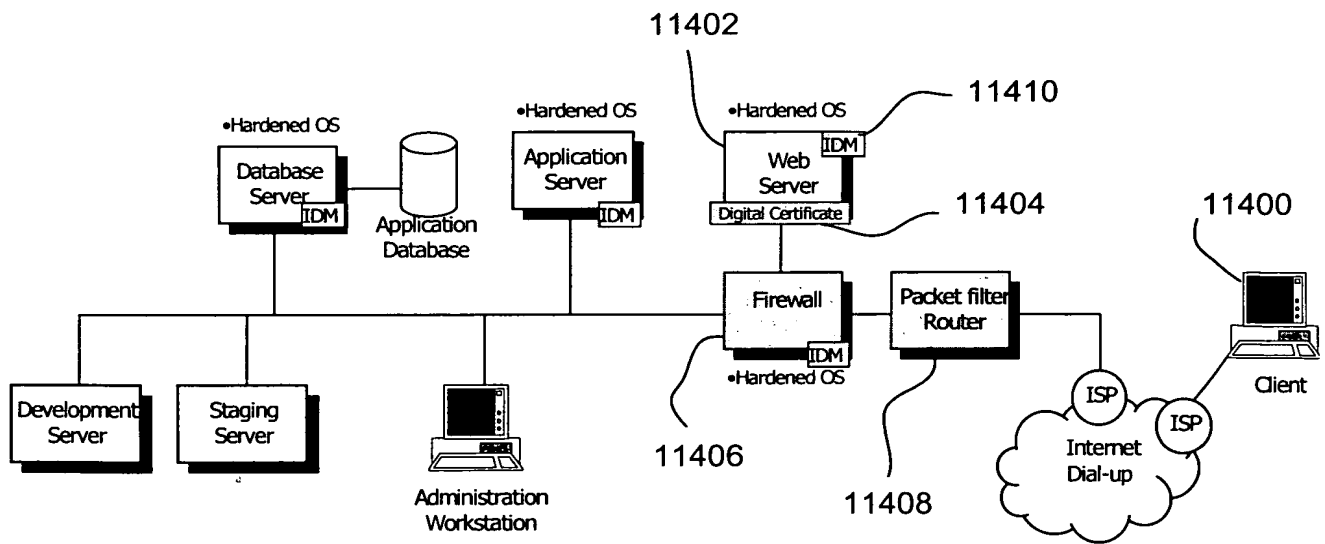


Figure 114

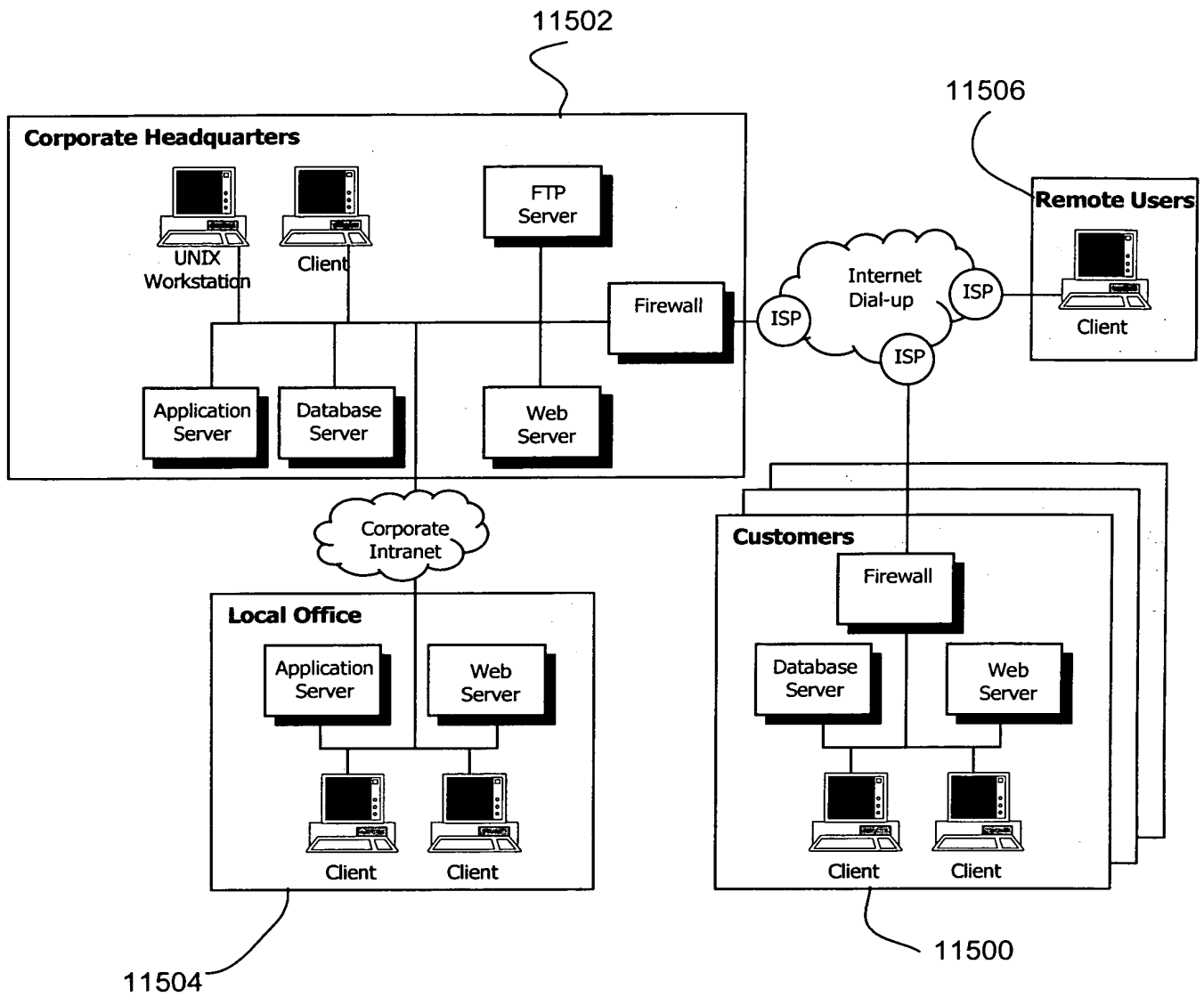


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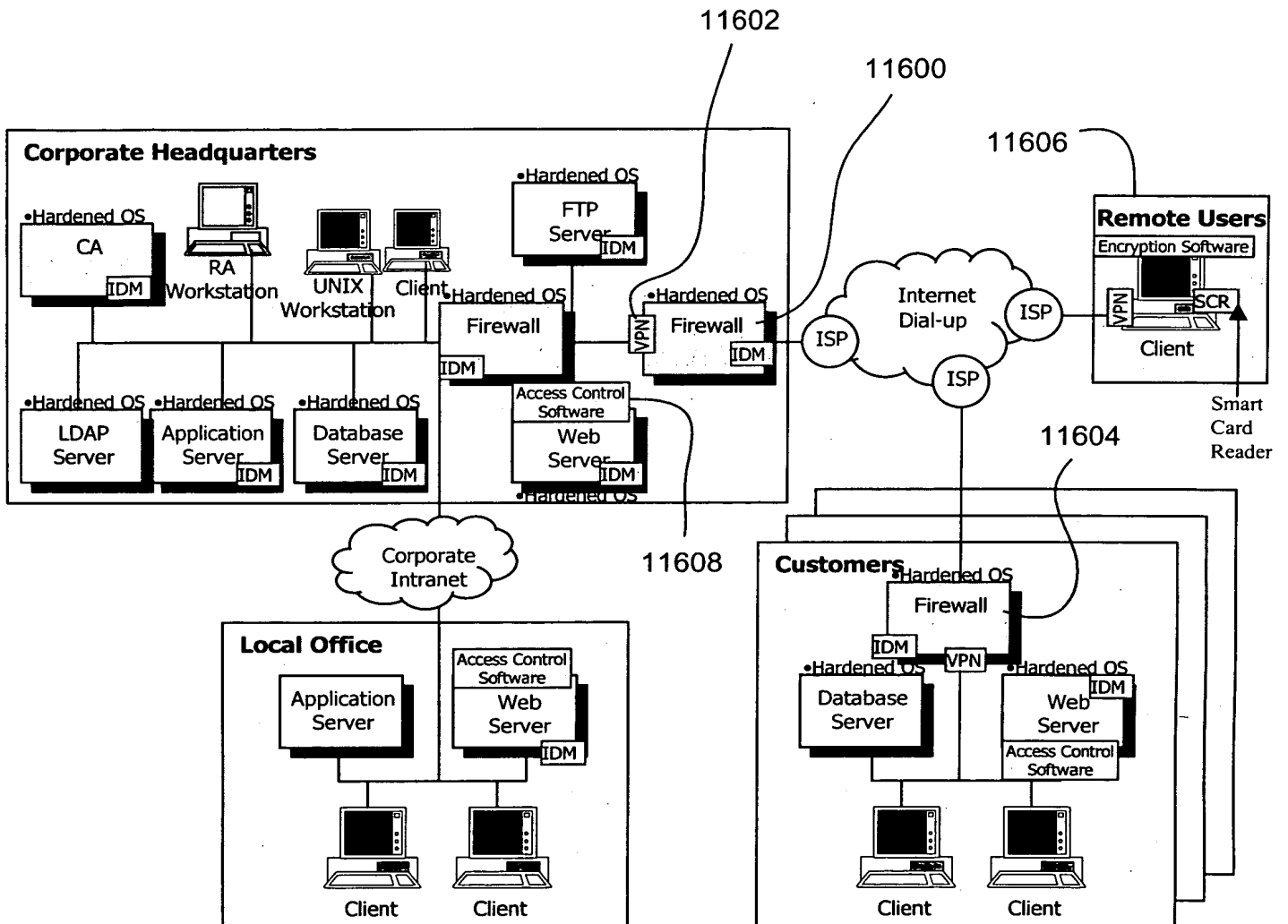


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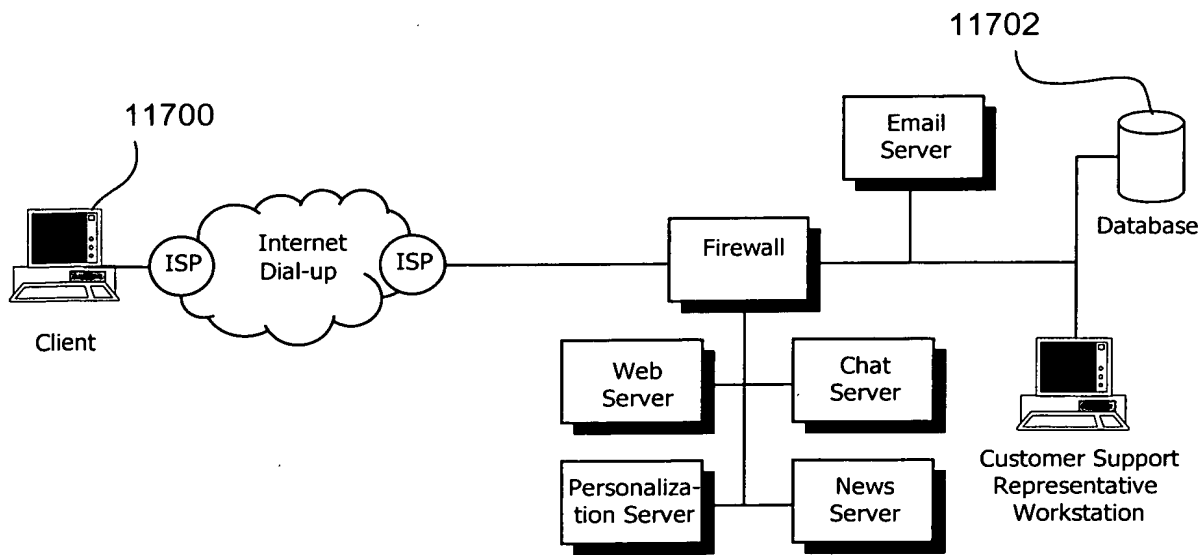


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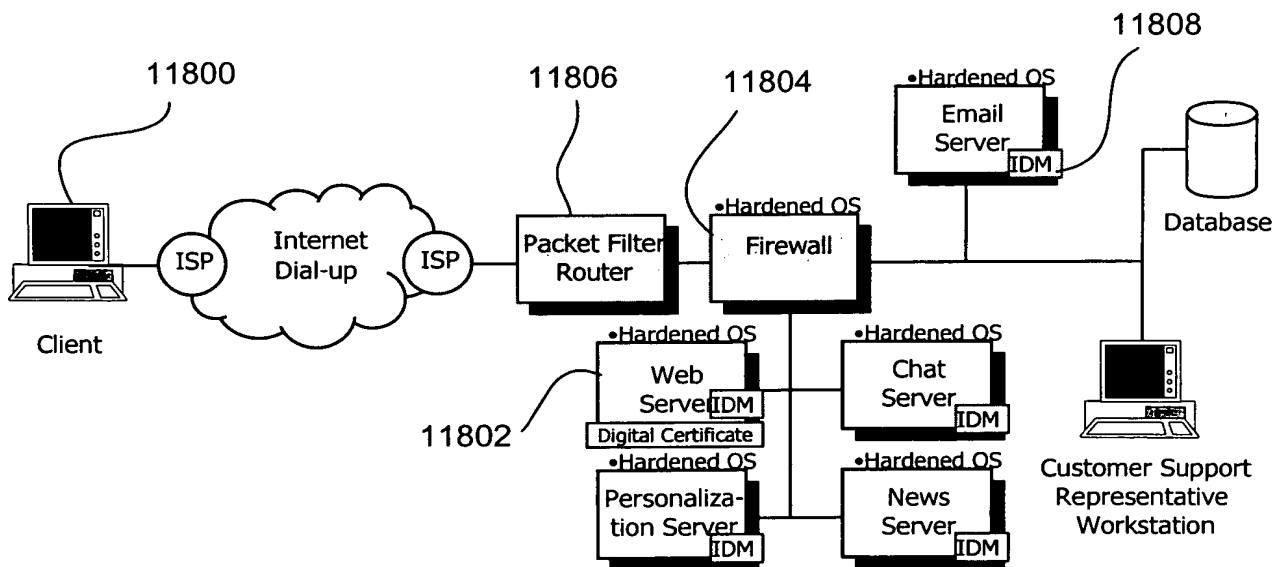


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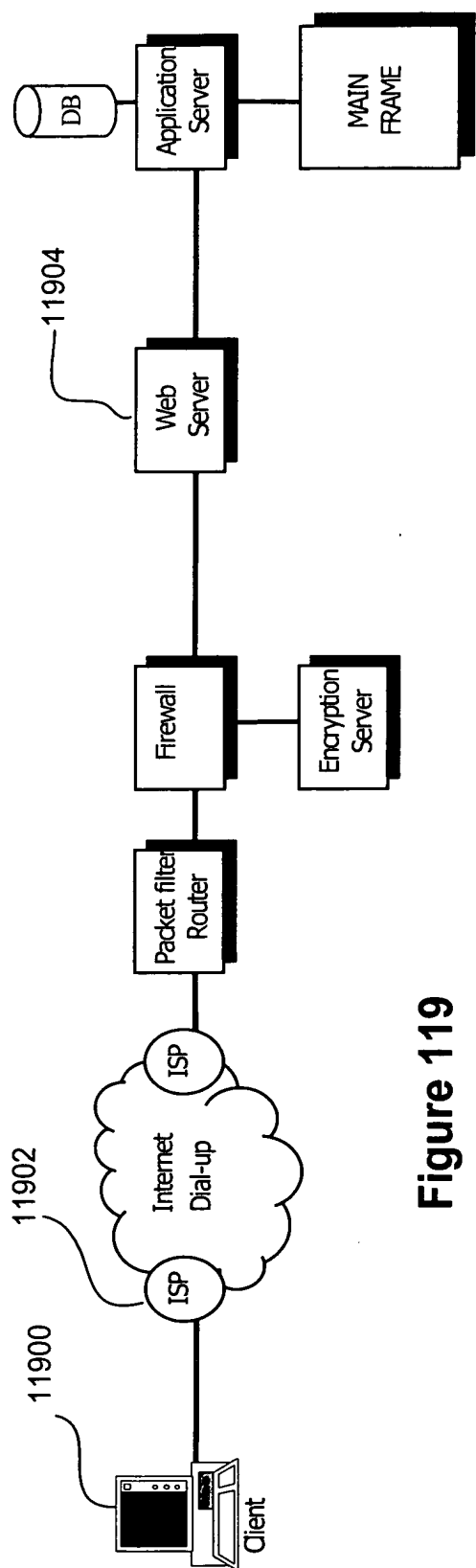


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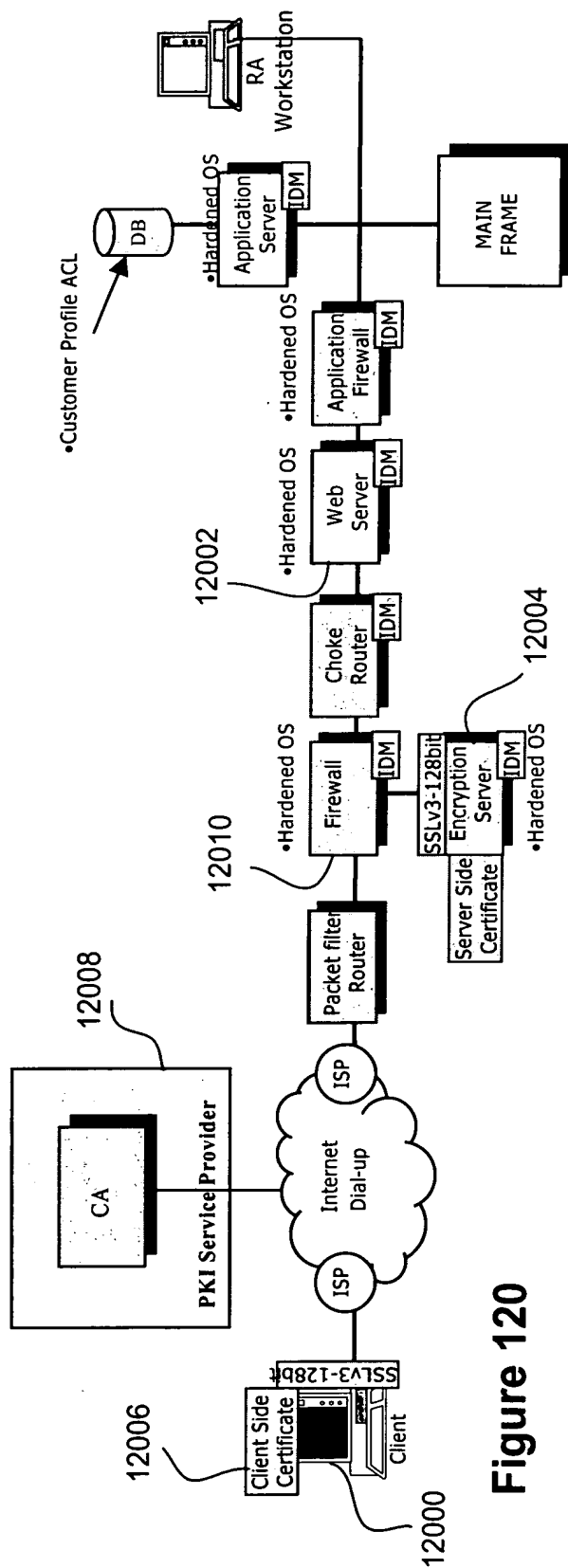


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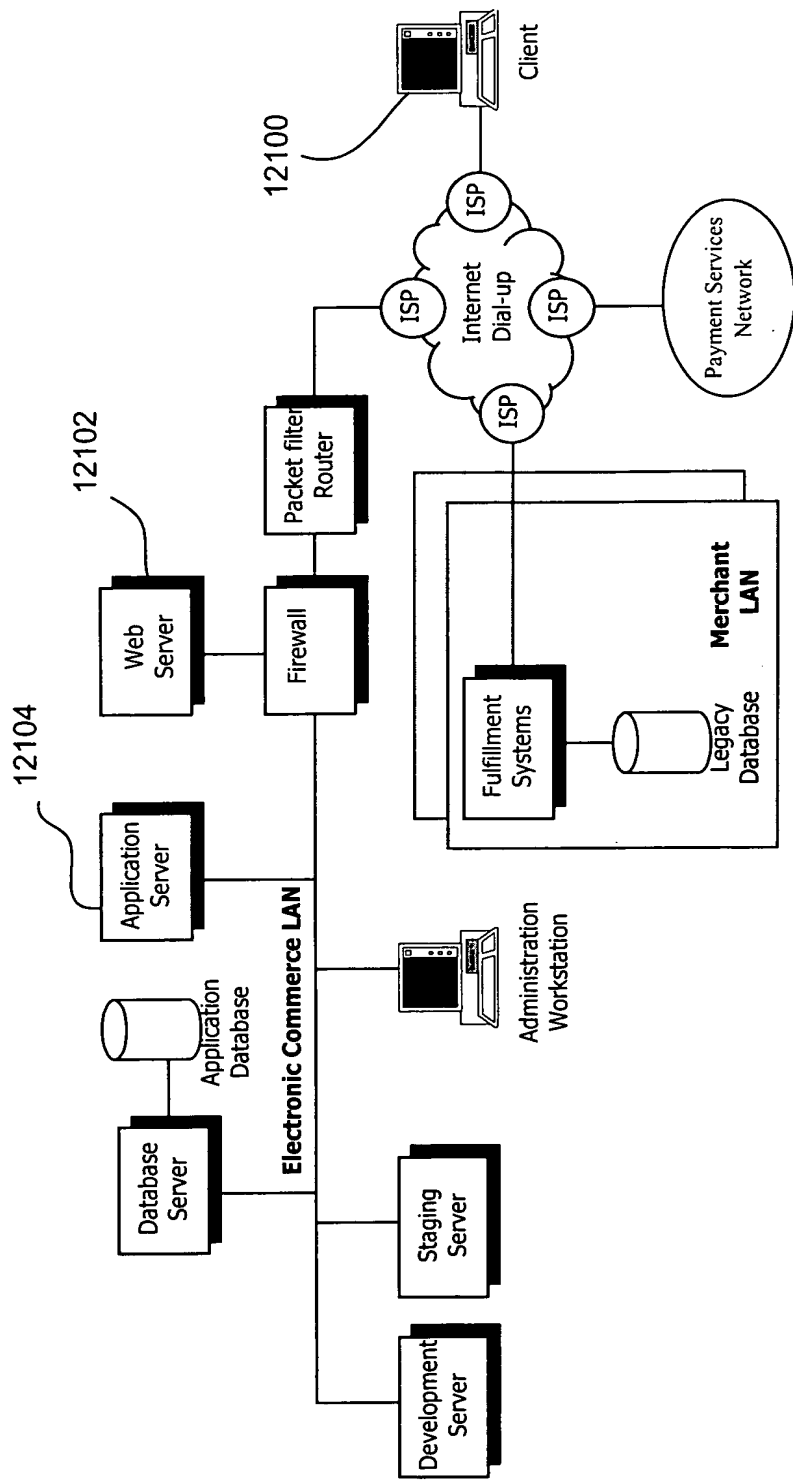


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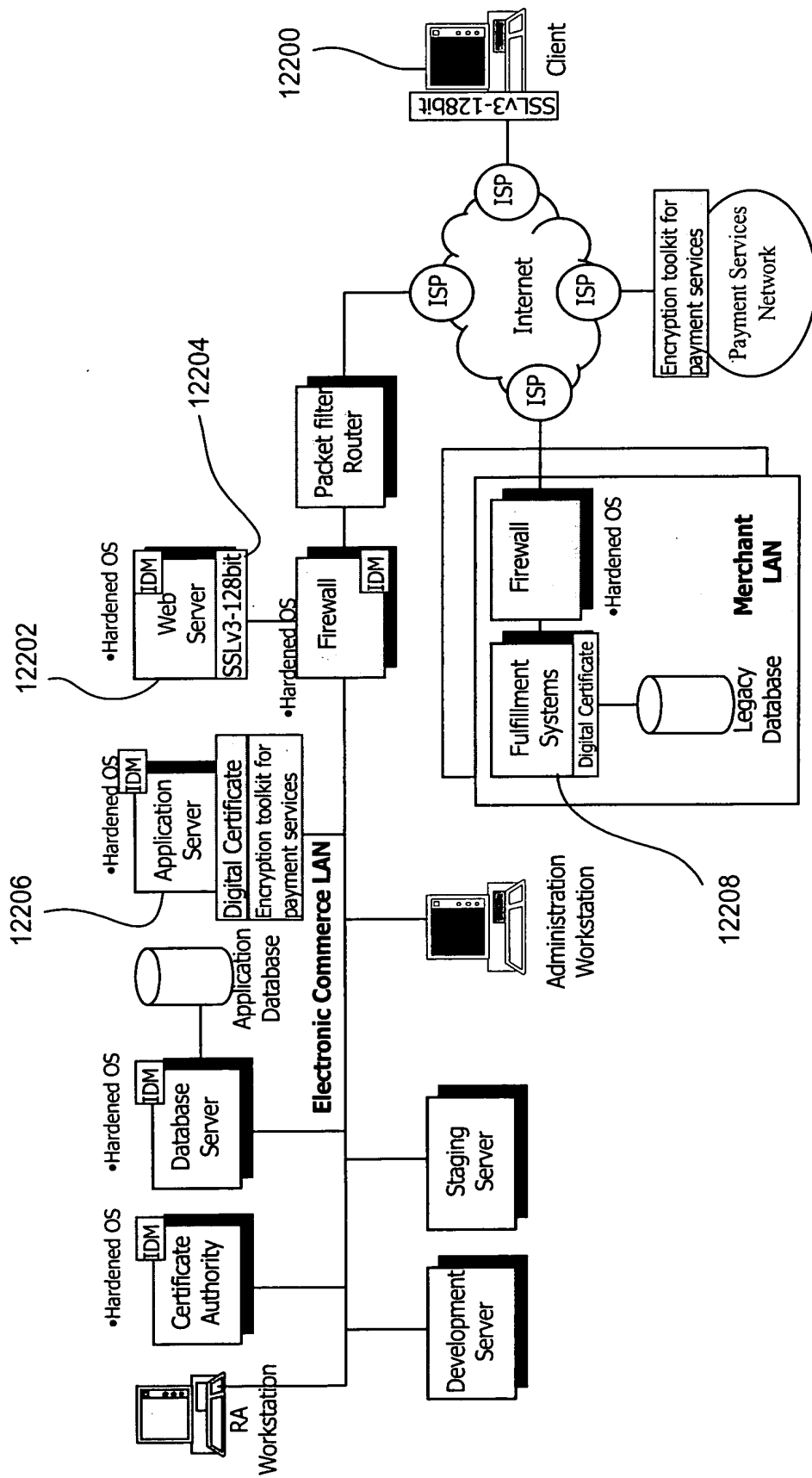


Figure 122

12300

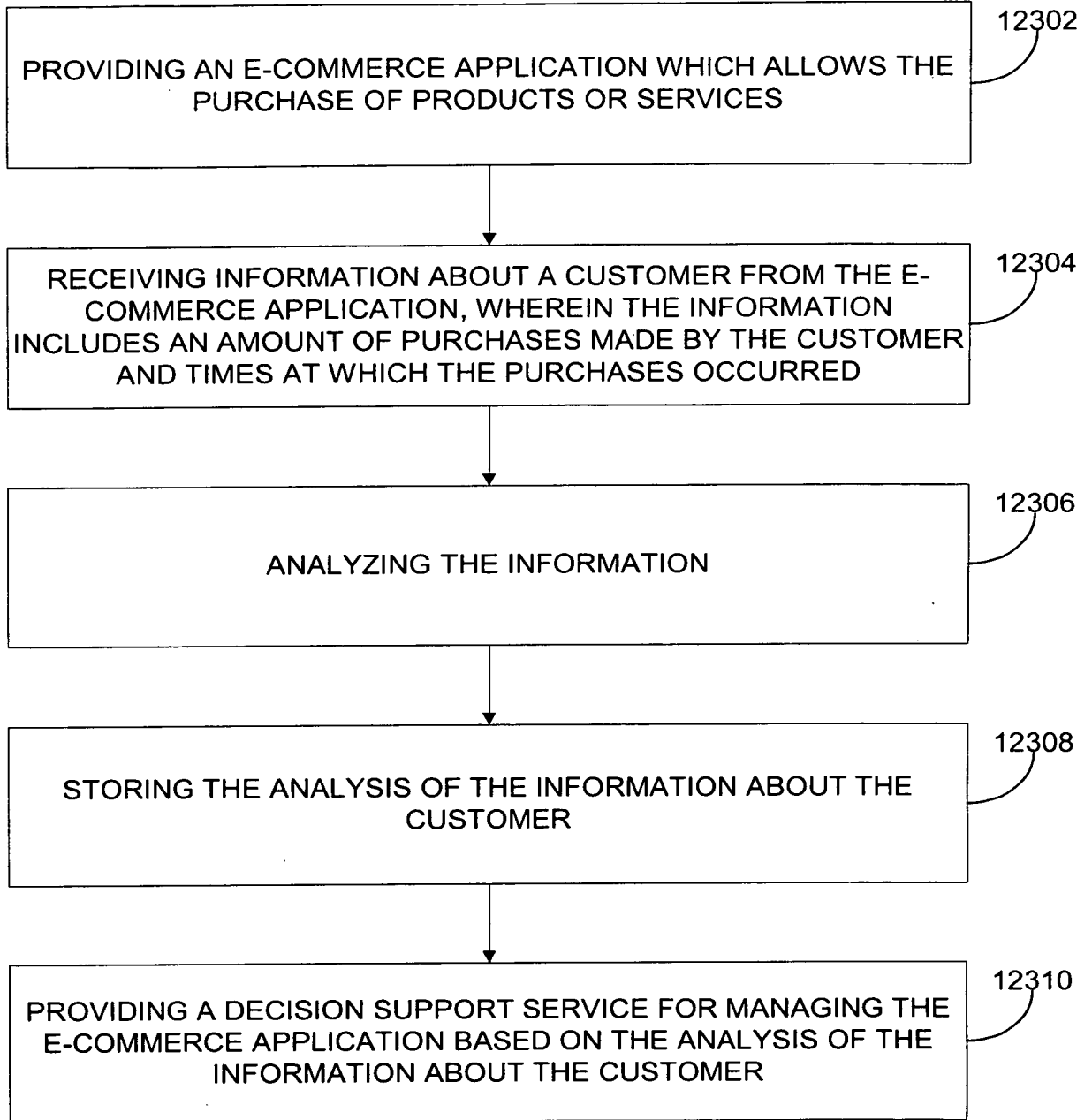


Figure 123

9016

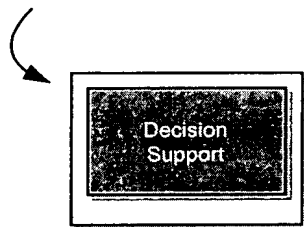


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9018

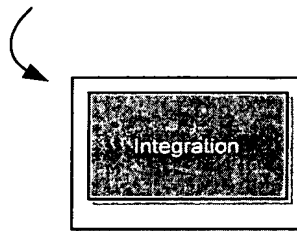


Figure 125

12600

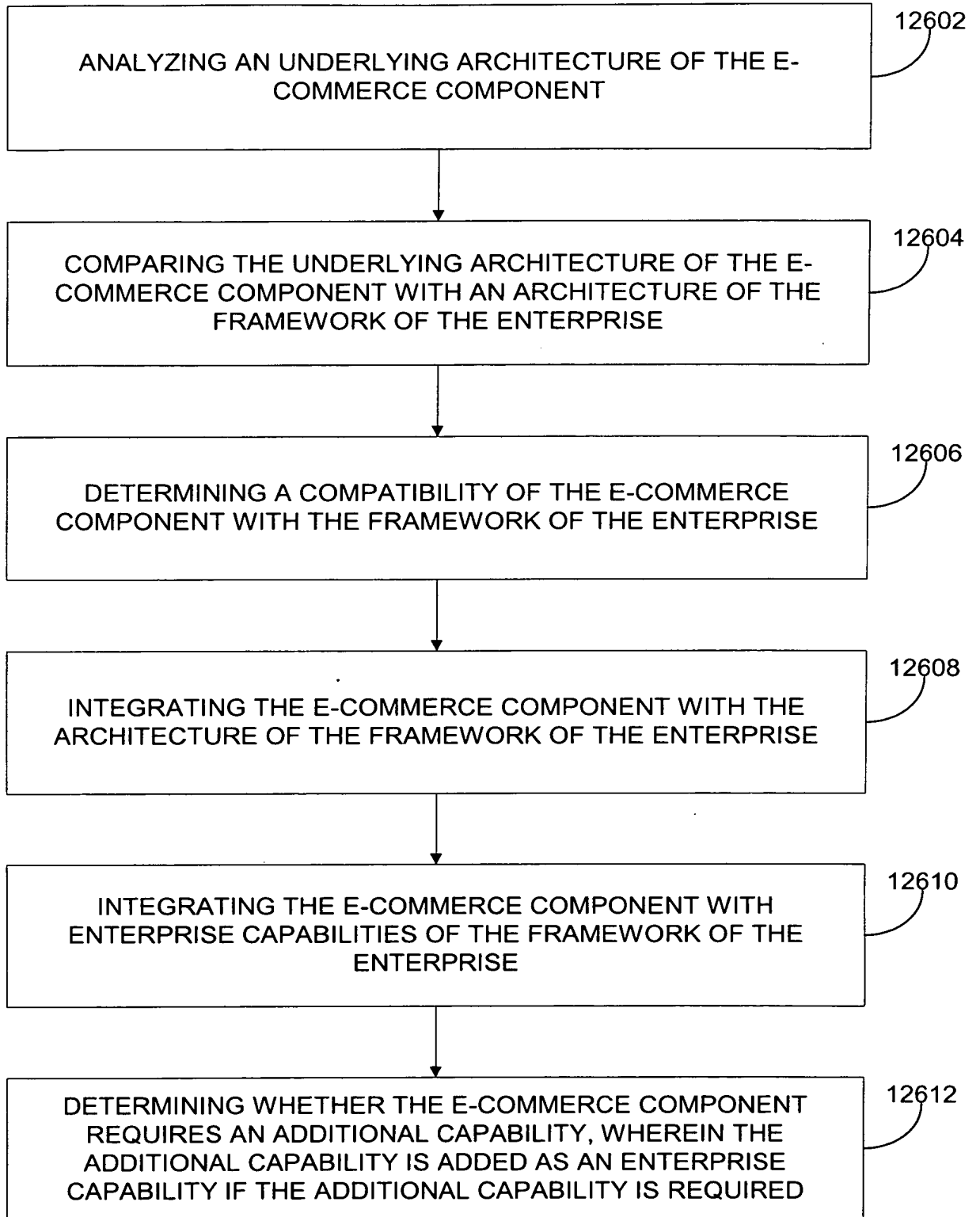
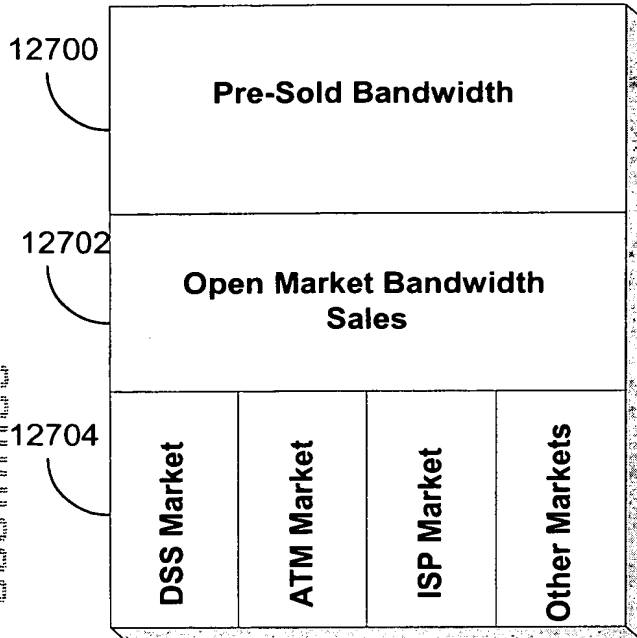


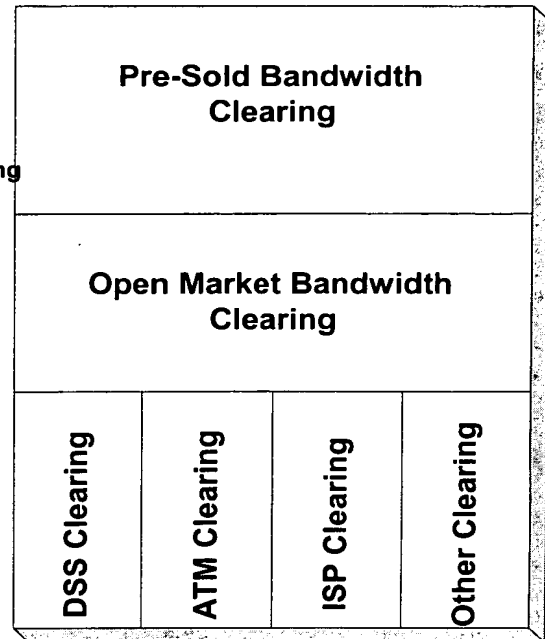
Figure 126

Bandwidth Market

Bandwidth Purchases



Net Settlements



Sales contracts
passed to clearing
and settlements
functions.

Contract IDs
correlate bandwidth
sales (with rating
info) to net
settlements
clearing function.

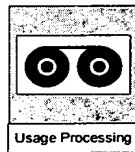


Figure 127

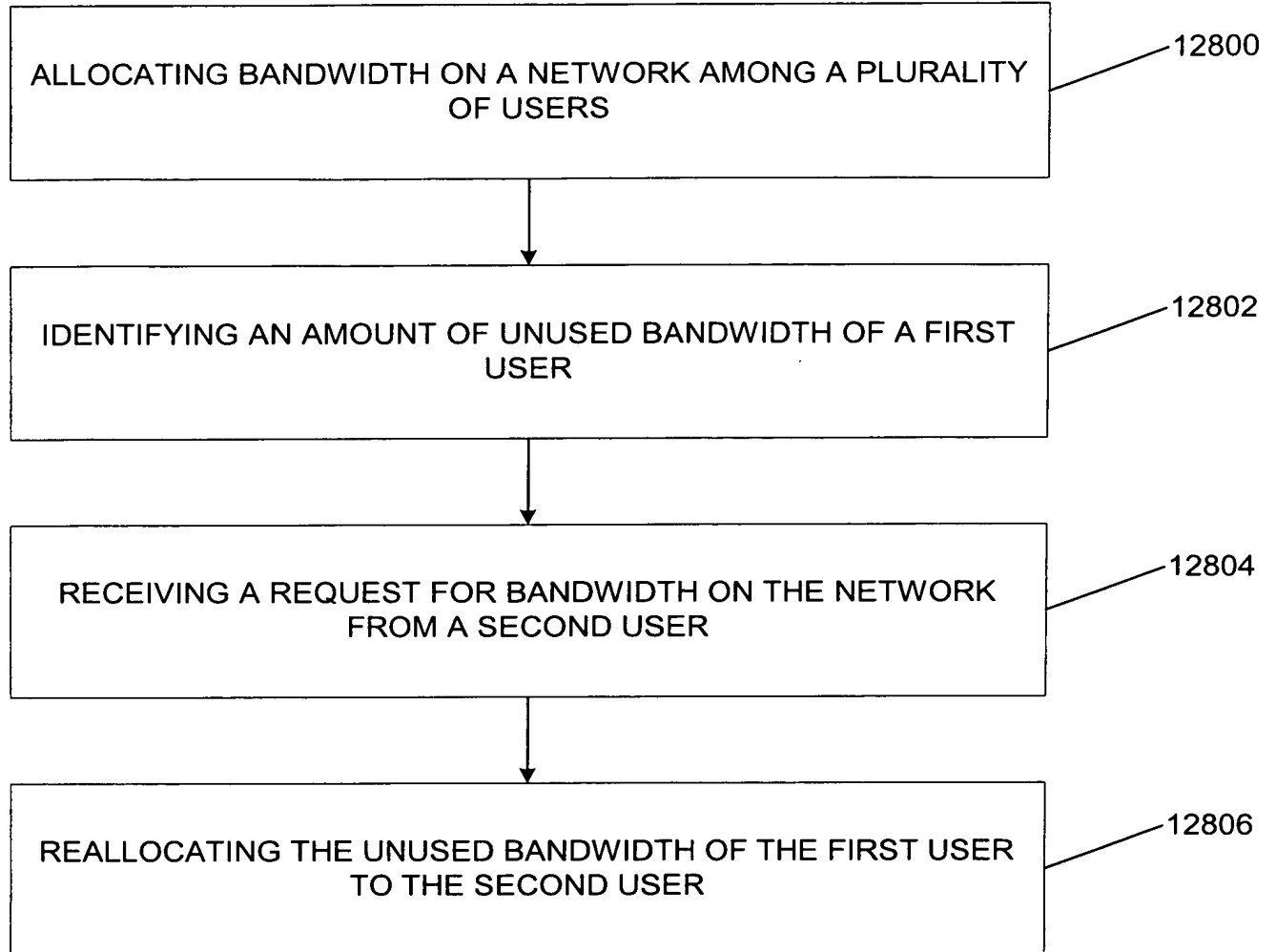


Figure 128

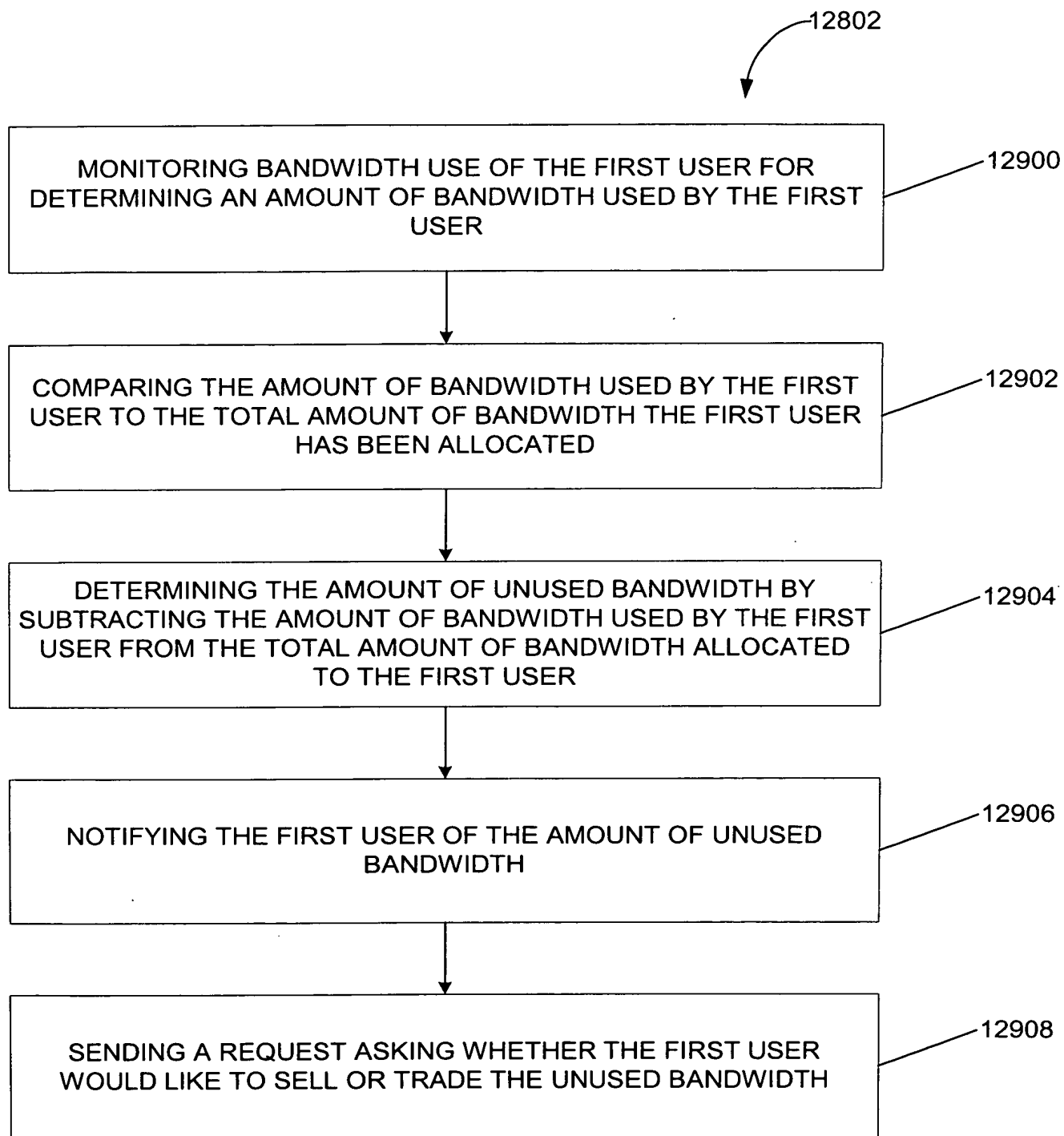


Figure 129

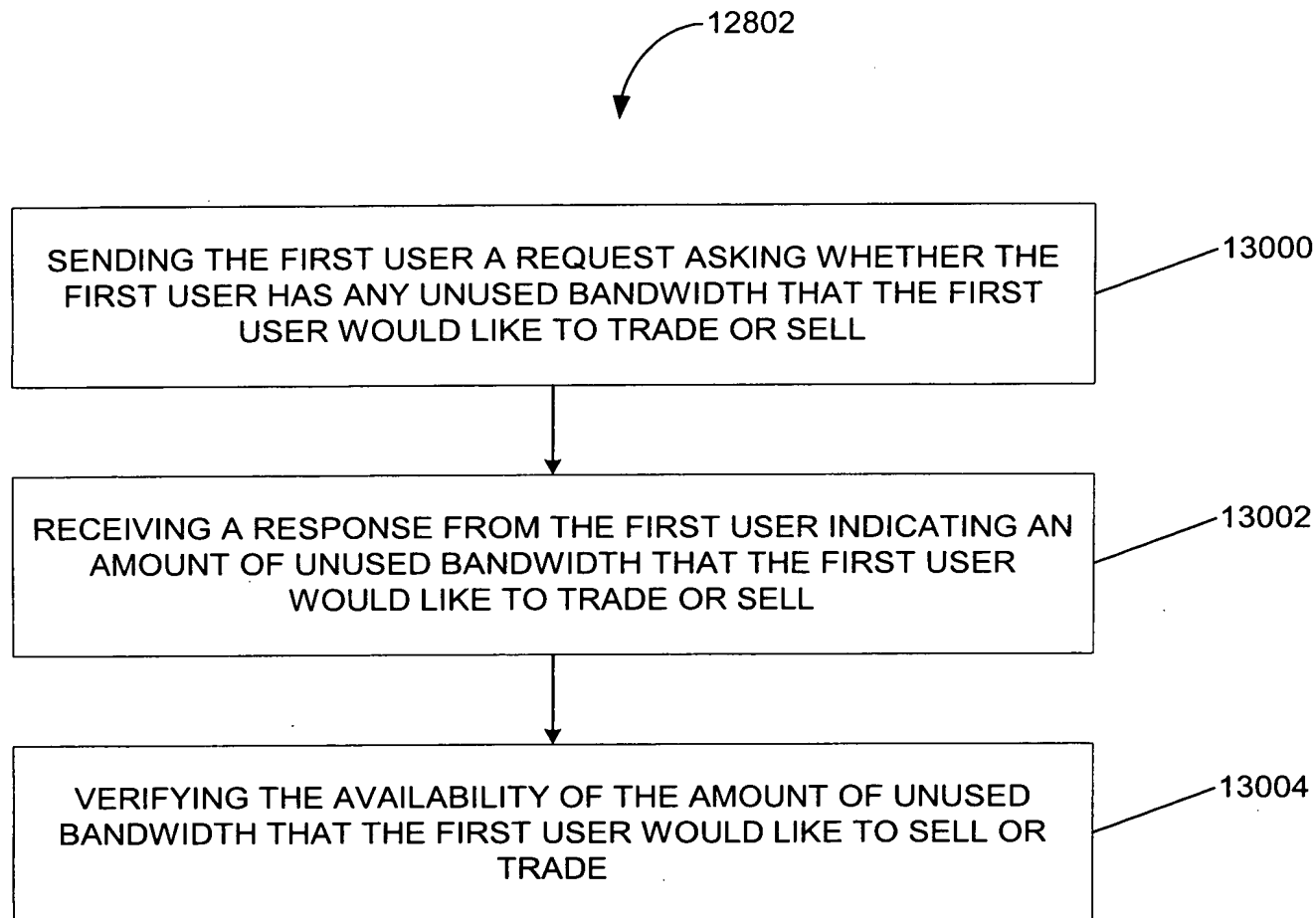


Figure 130

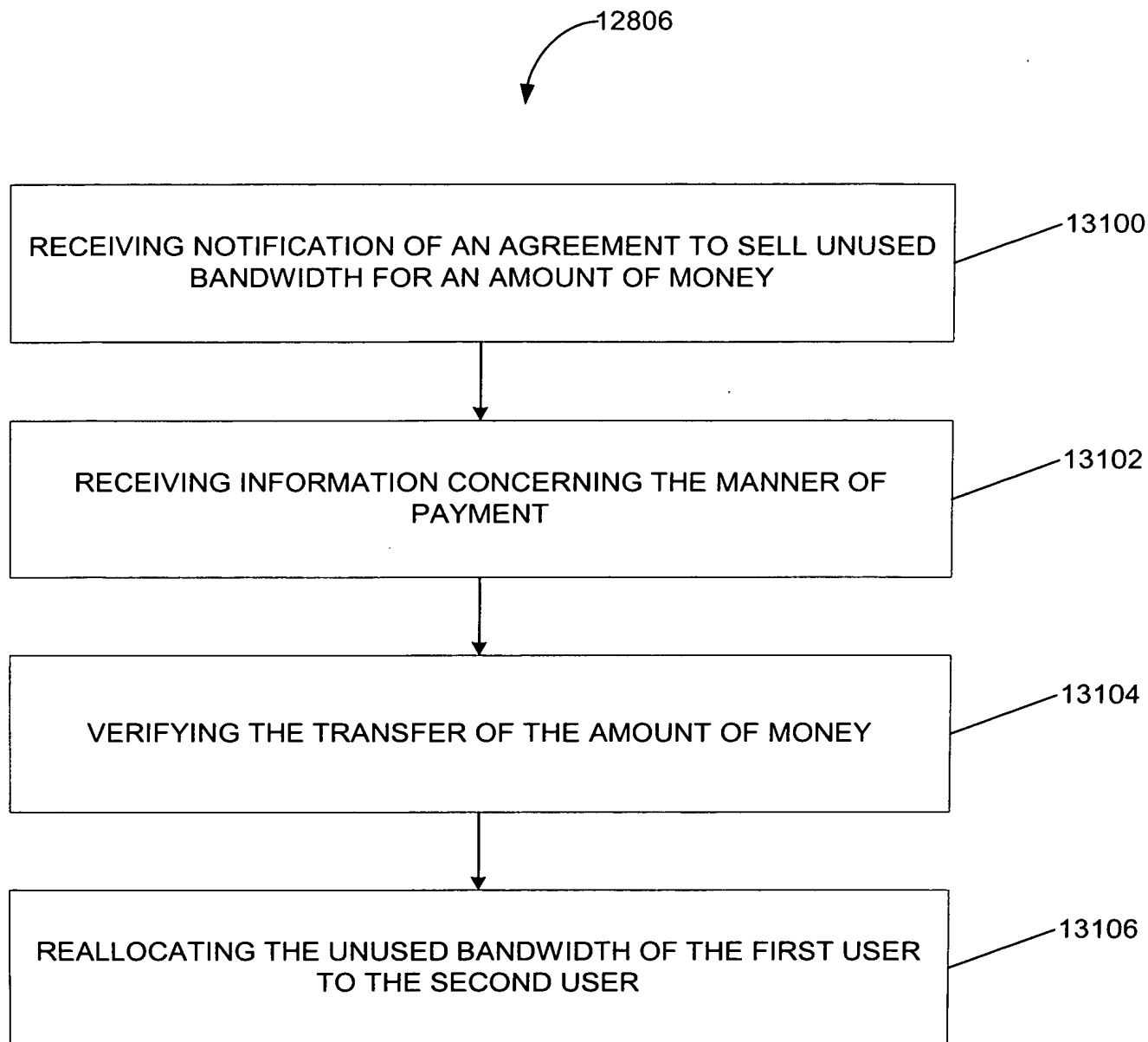


Figure 131

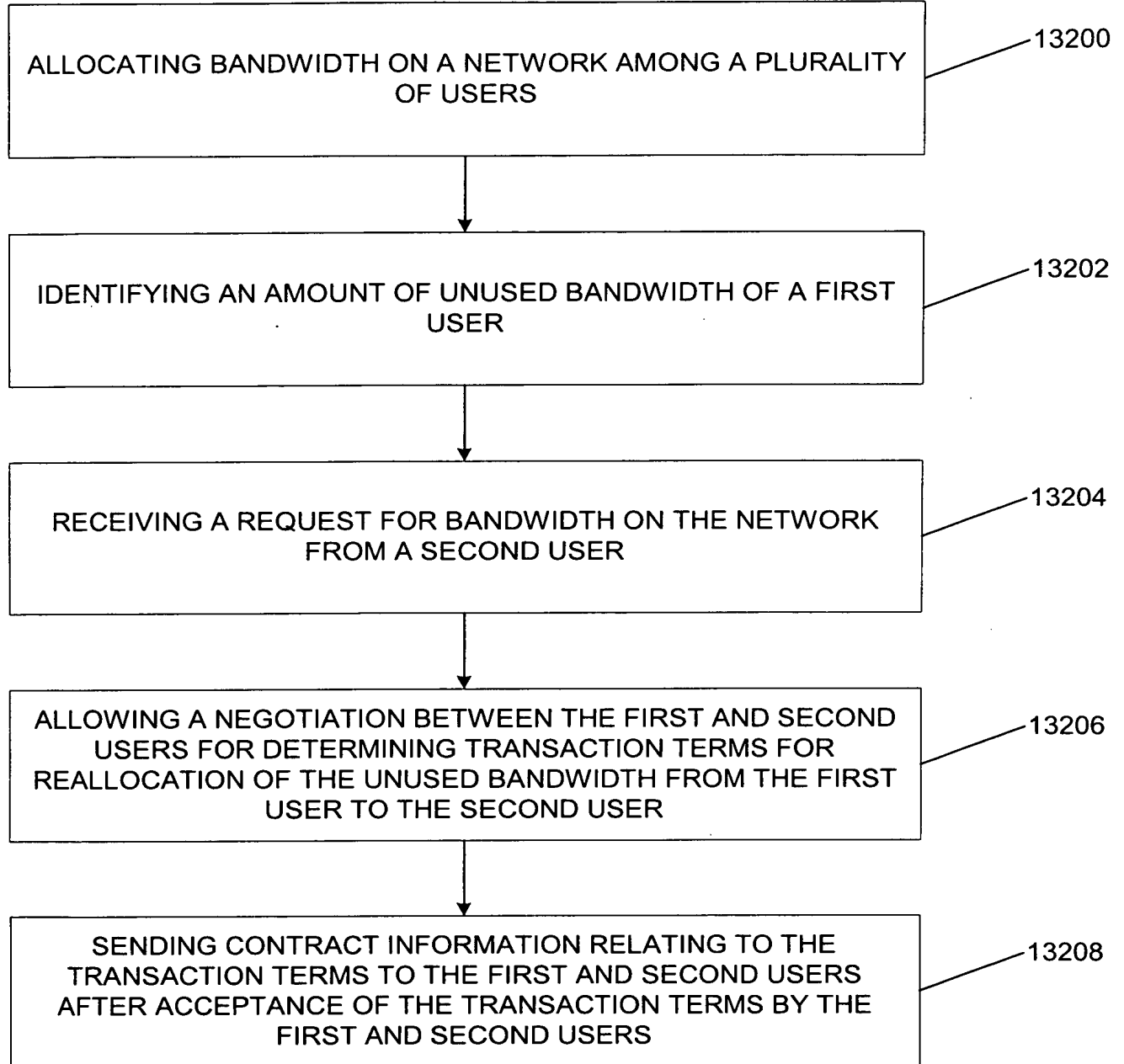


Figure 132

Bandwidth Contract Flow

13302

13308

Bandwidth Market

Step #4: Bandwidth purchase completes and transaction information (including pricing, QoS, etc.) recorded.

Clearing and Settlements

Step #9: CNBC correlates EDRs with contract and rates connection based on contract information. The CNBC then performs a clearing and settlements function netting out the transfer of funds between different DVNS.

Step #5: Contract information (including Contract ID) forwarded to clearing function.

Step #3: DVNS_b requests (bid) and purchases bandwidth for CPE_b connection

Step #8: DVNS_b forwards Event Data Record (EDR) to CNBC with connection usage information and Contract ID.

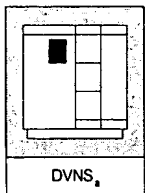
Step #7: CPE_b forwards Raw Usage Data (RUD) to DVNS.

Step #6: Contract information (including Contract ID) forwarded to CPE_b.

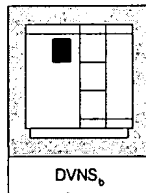
Step #2: CPE_b requests bandwidth for connection

Step #1: DVNS_a posts (offer) excess bandwidth on market.

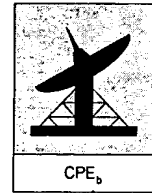
Step #5: Contract information (including Contract ID) forwarded to all DVNS involved in transaction.



13300



13306



13304

Figure 133

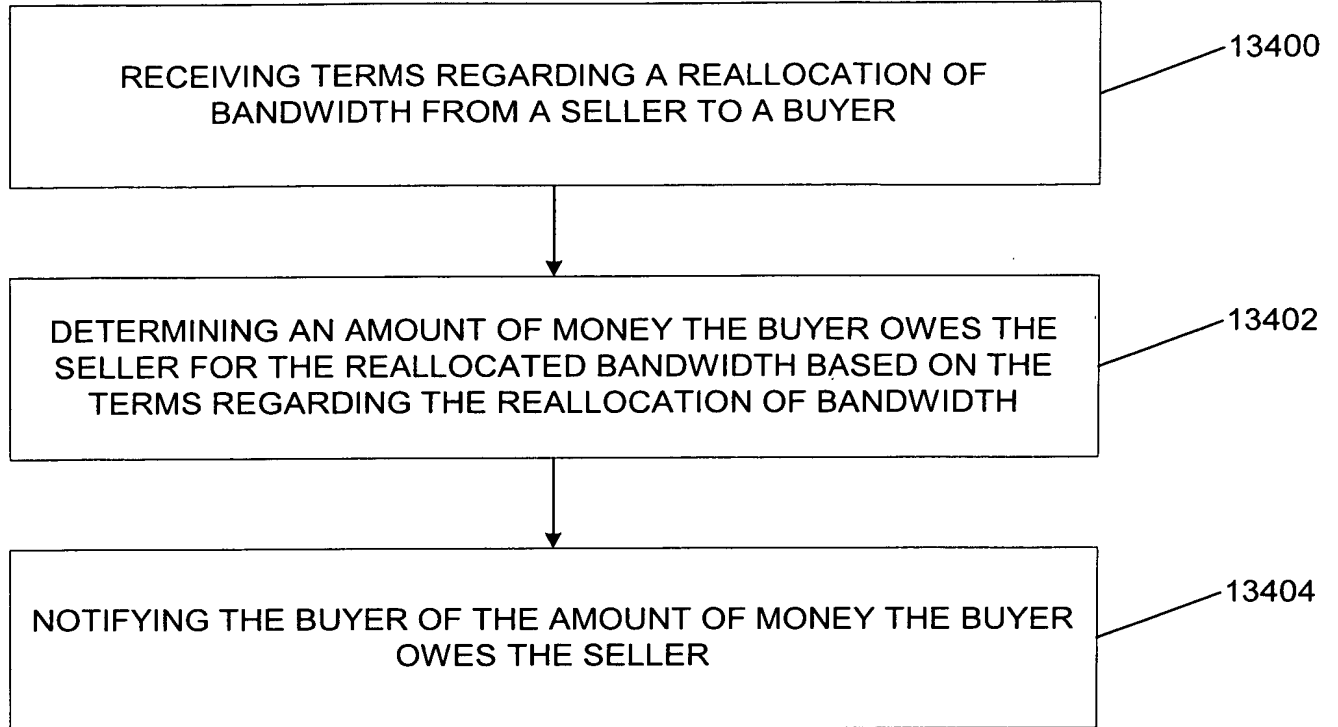


Figure 134

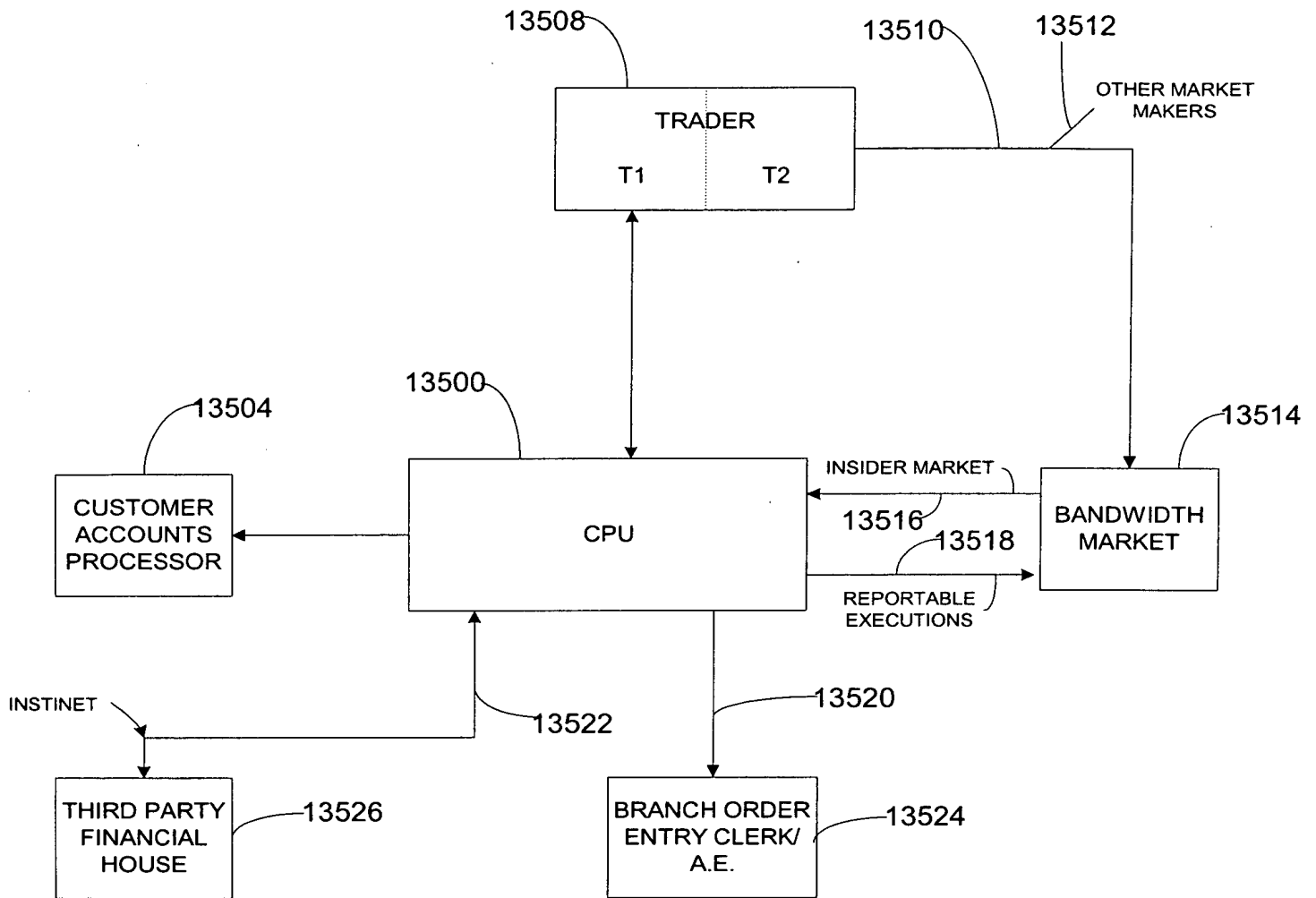


Figure 135

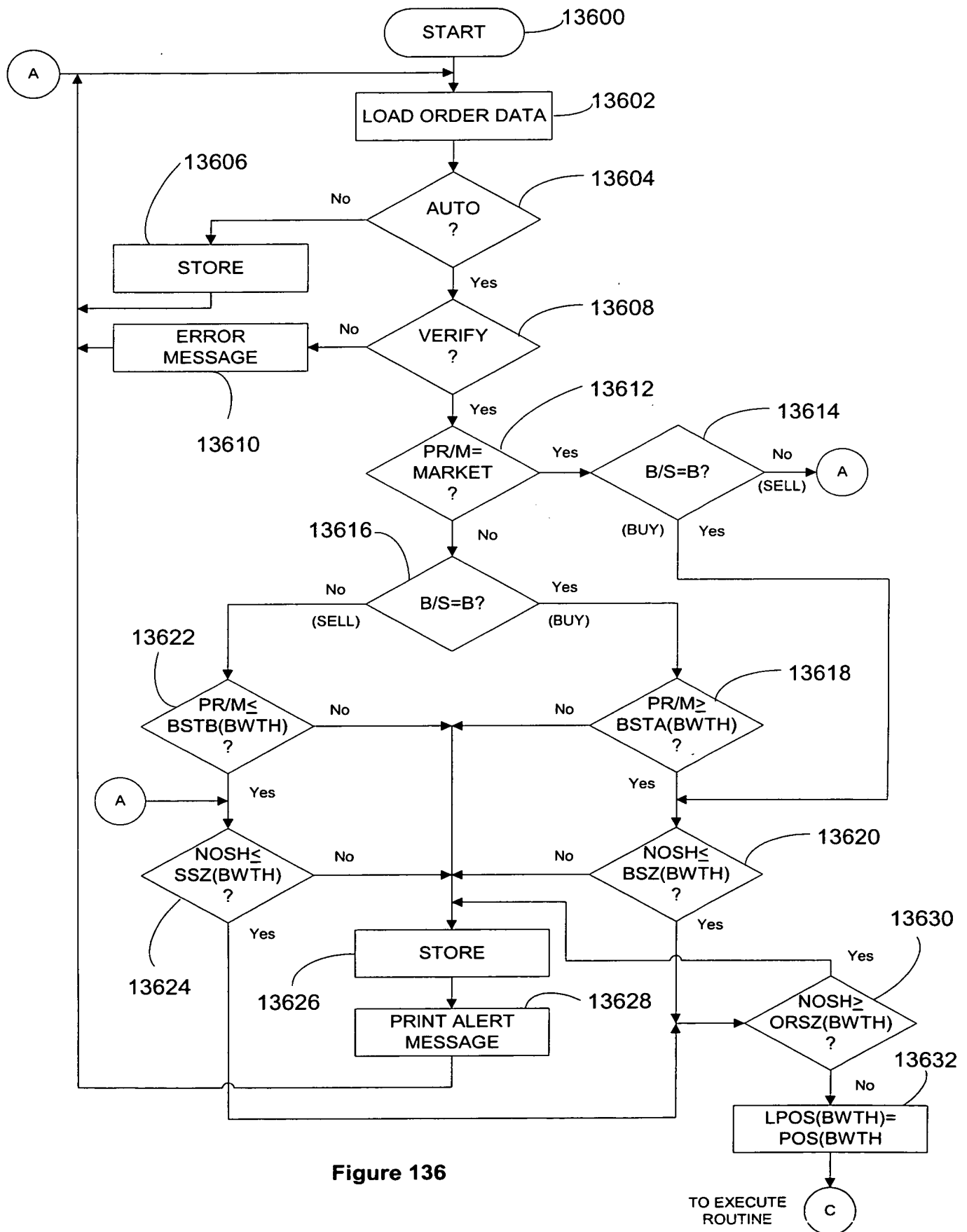


Figure 136

FROM ORDER
QUALIFICATION (FIGURE 137)

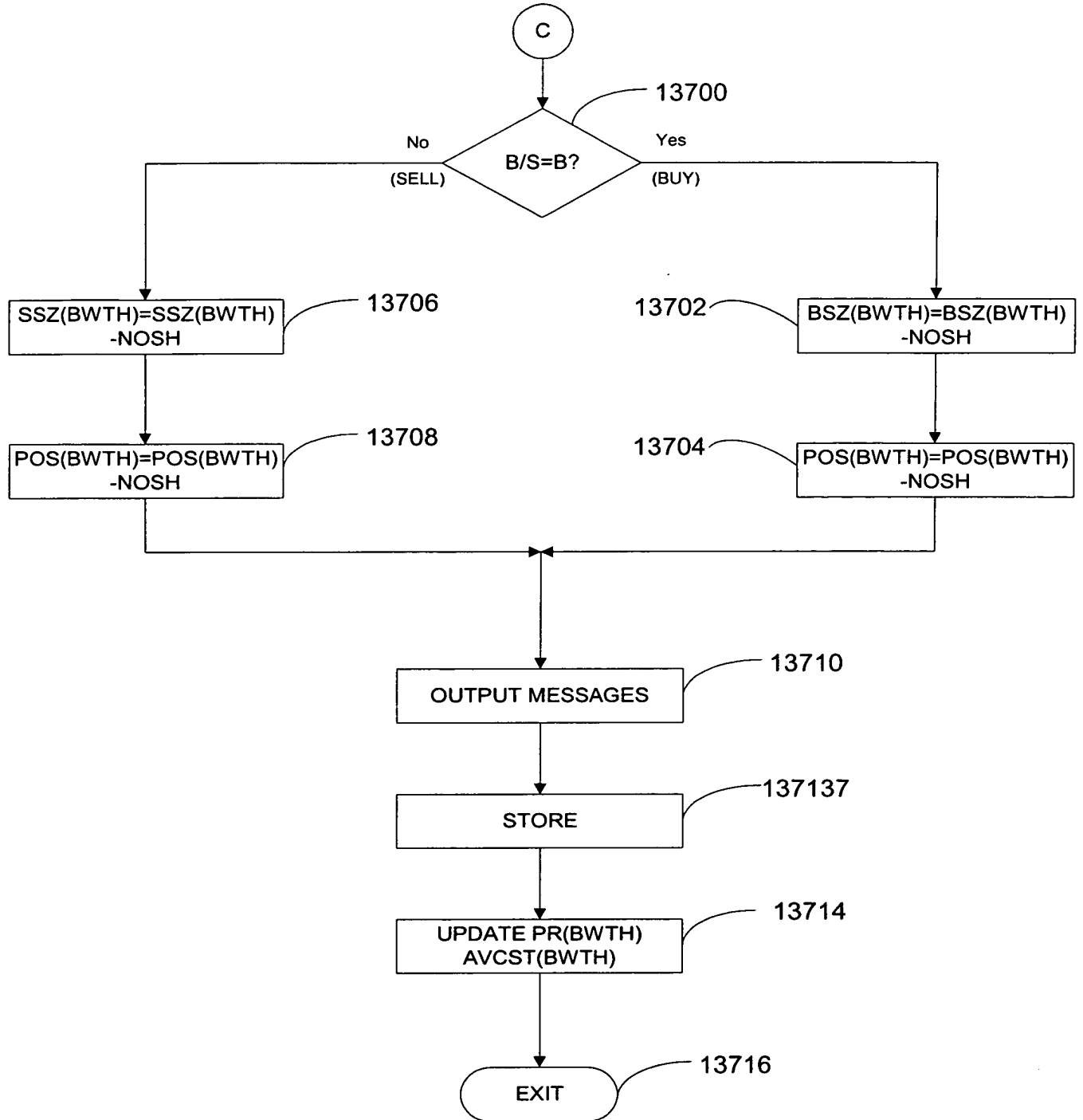


Figure 137

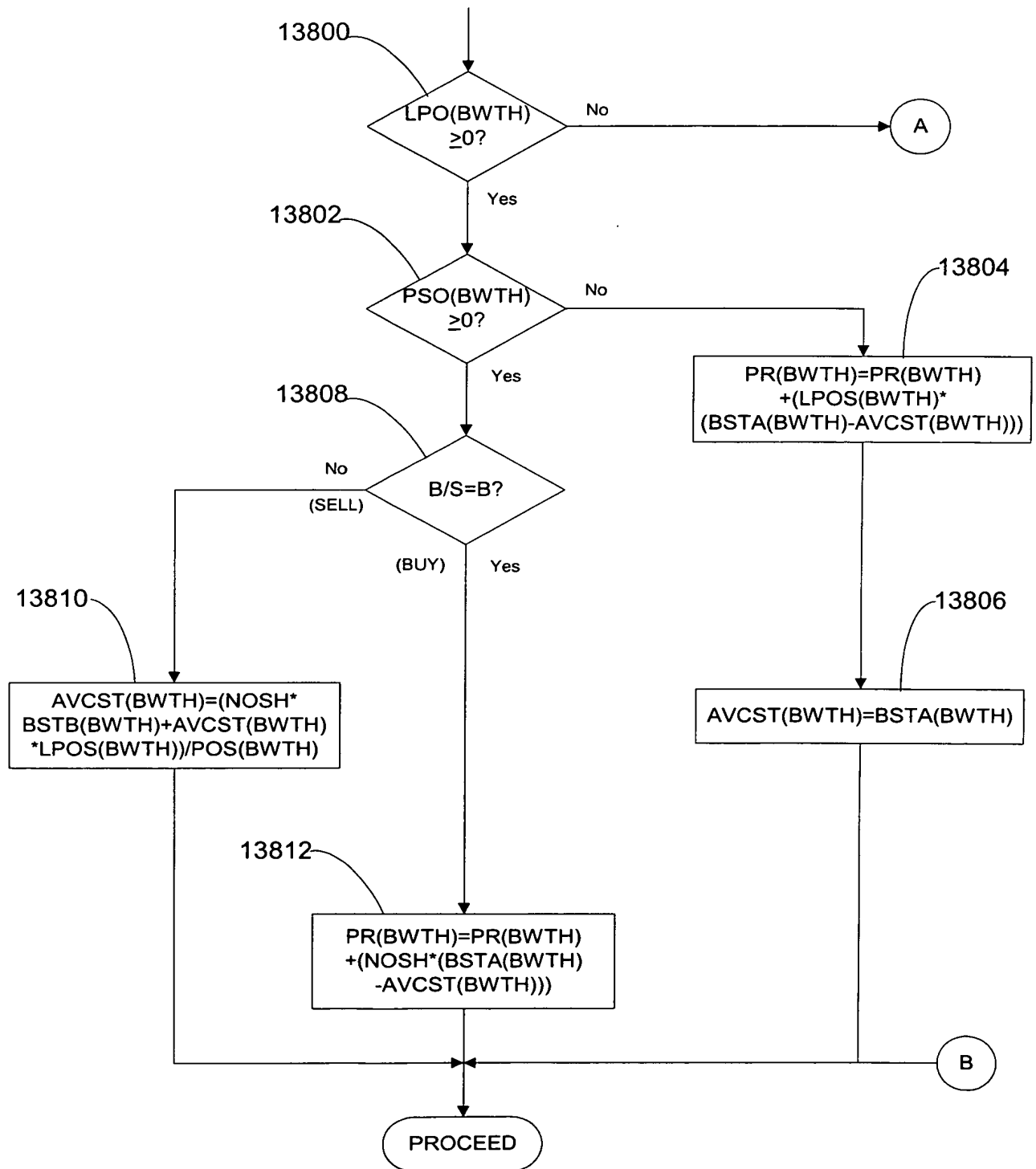


Figure 138

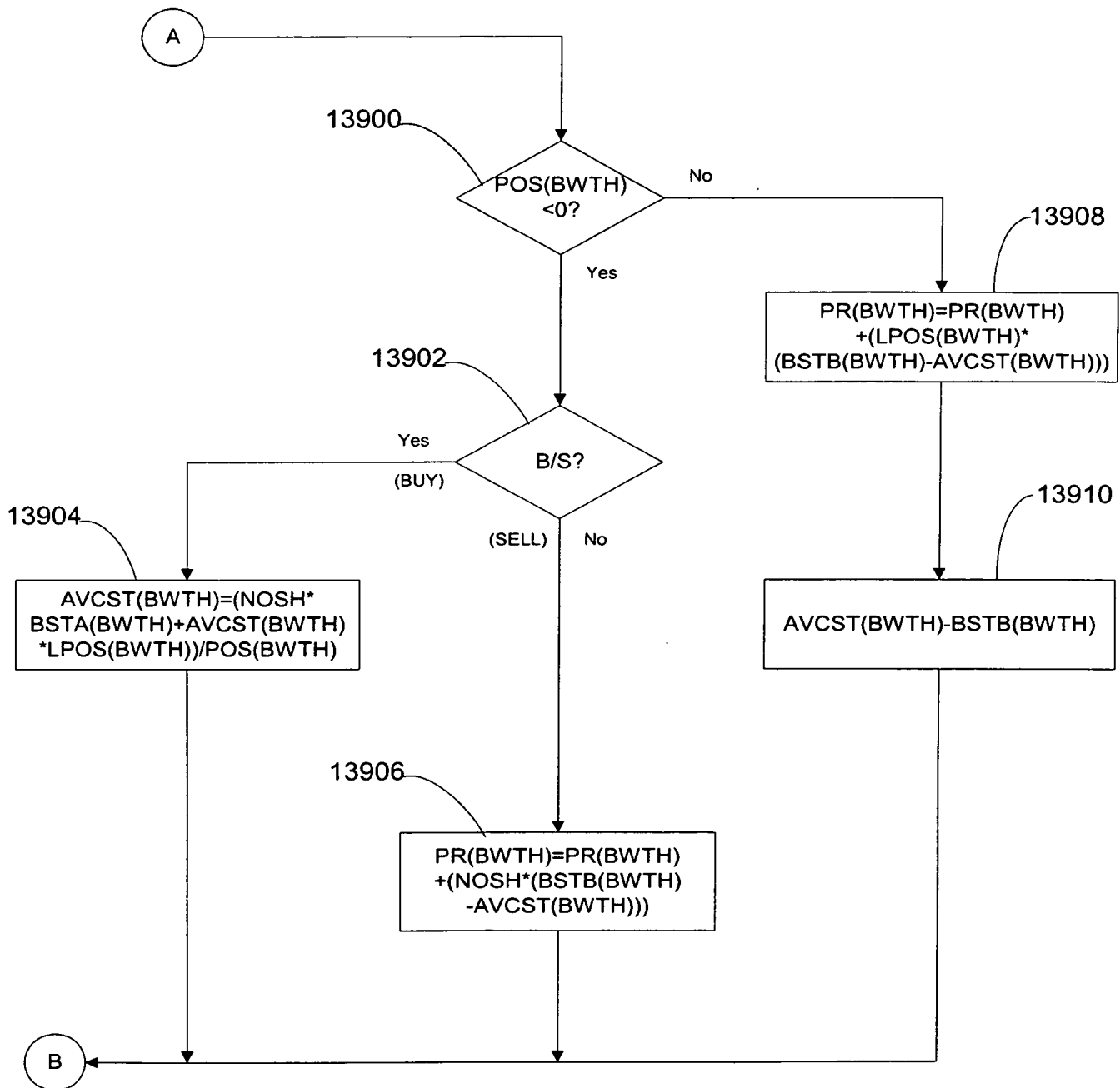


Figure 139

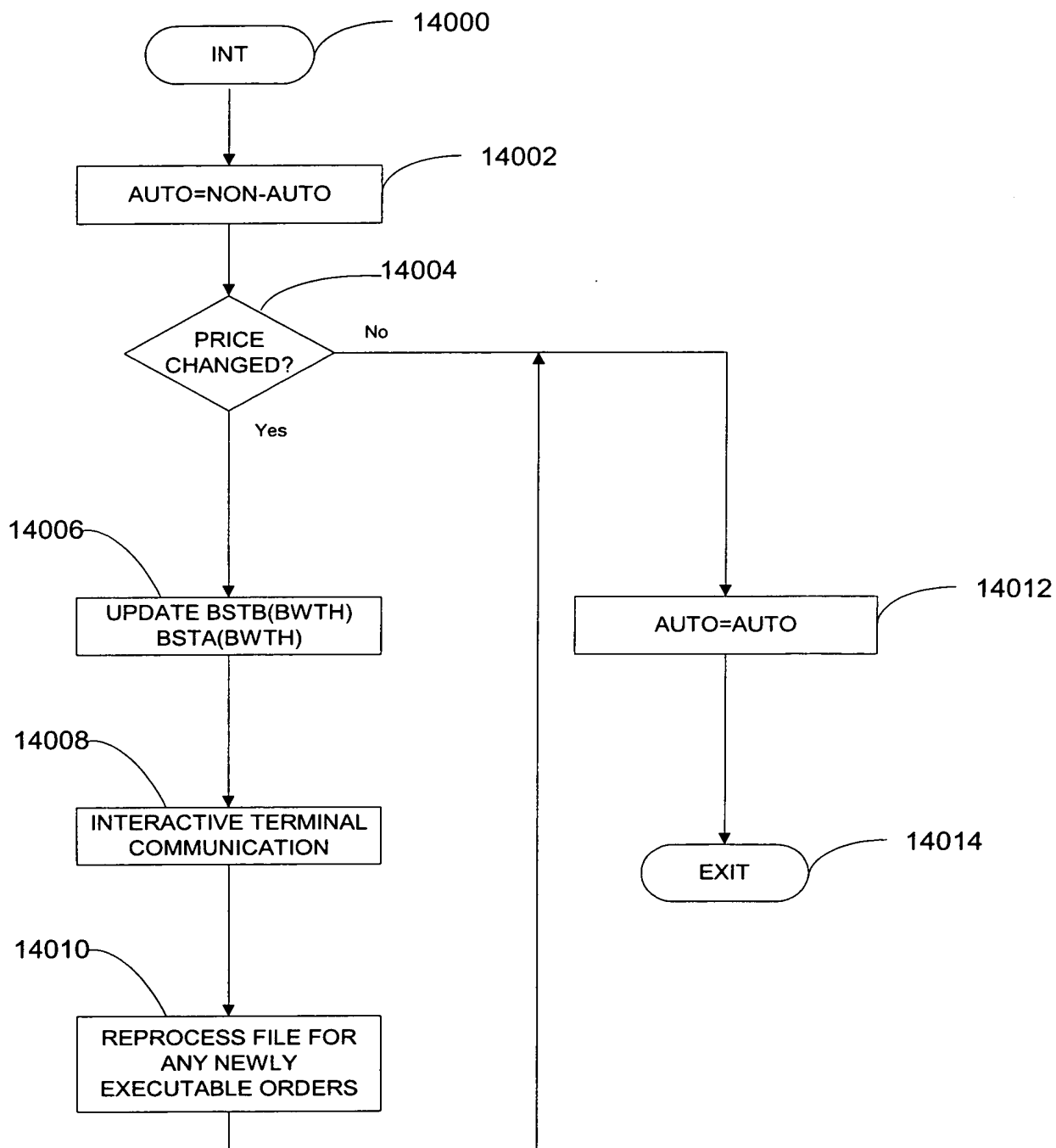


Figure 140

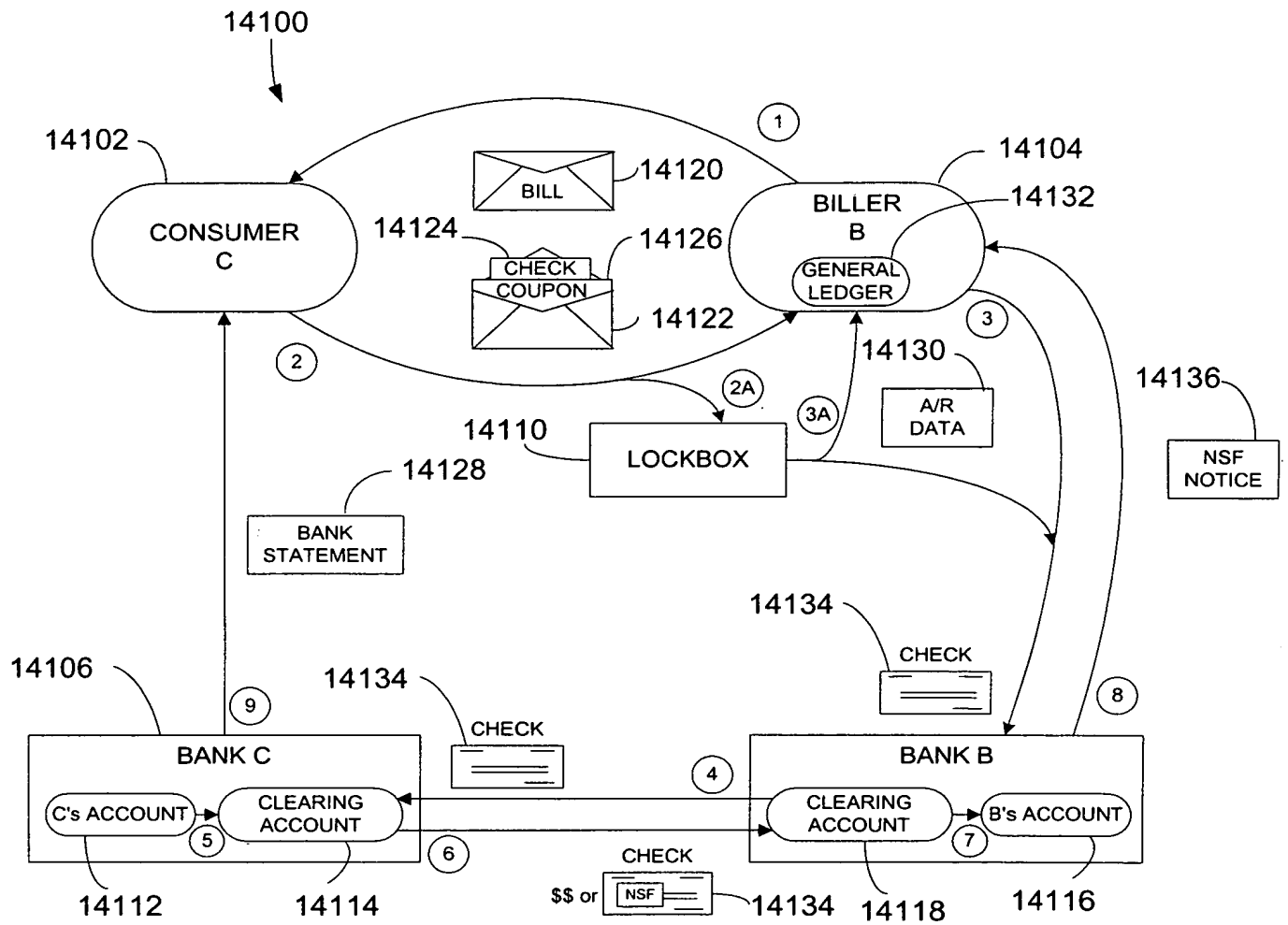


Figure 141

14200

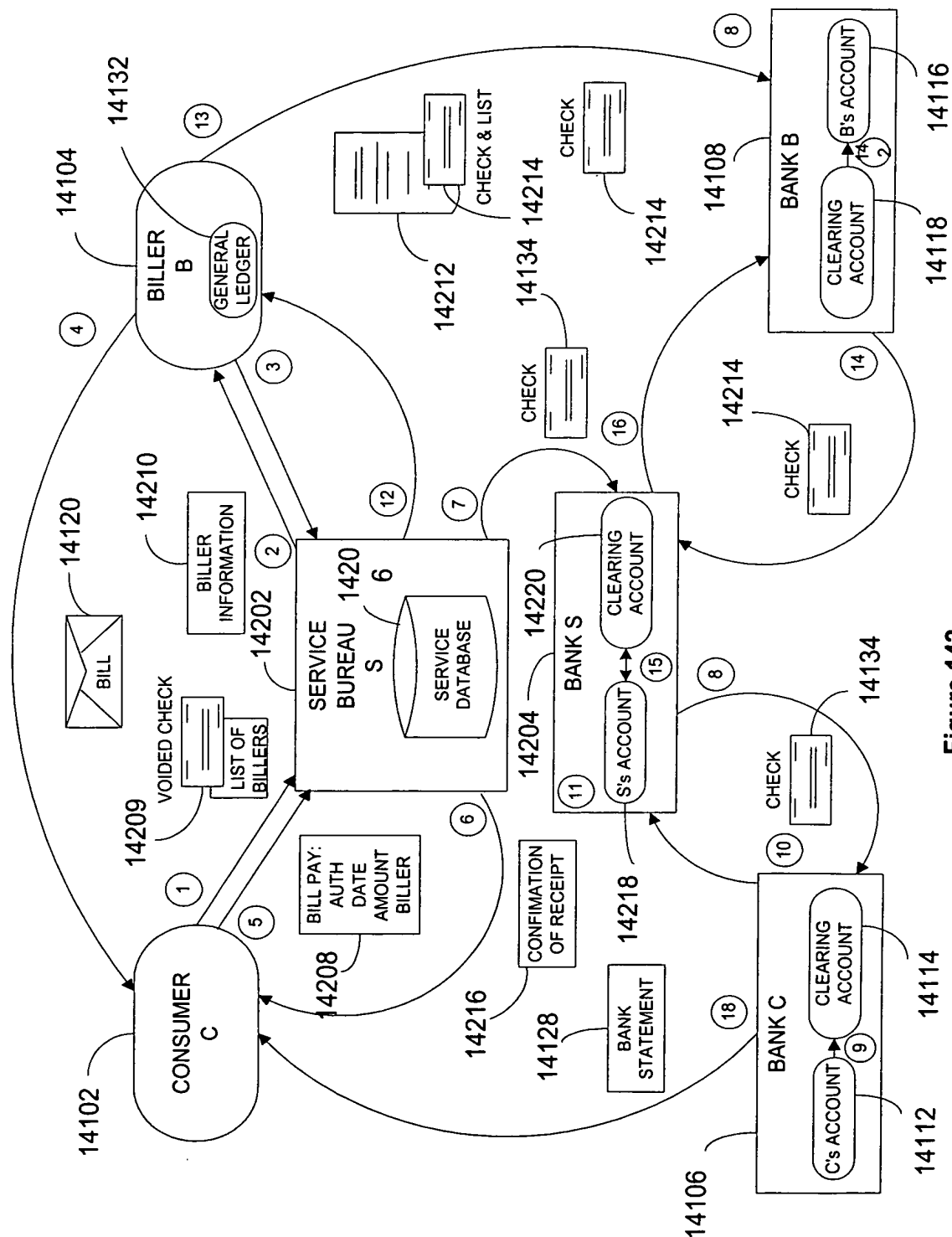


Figure 142

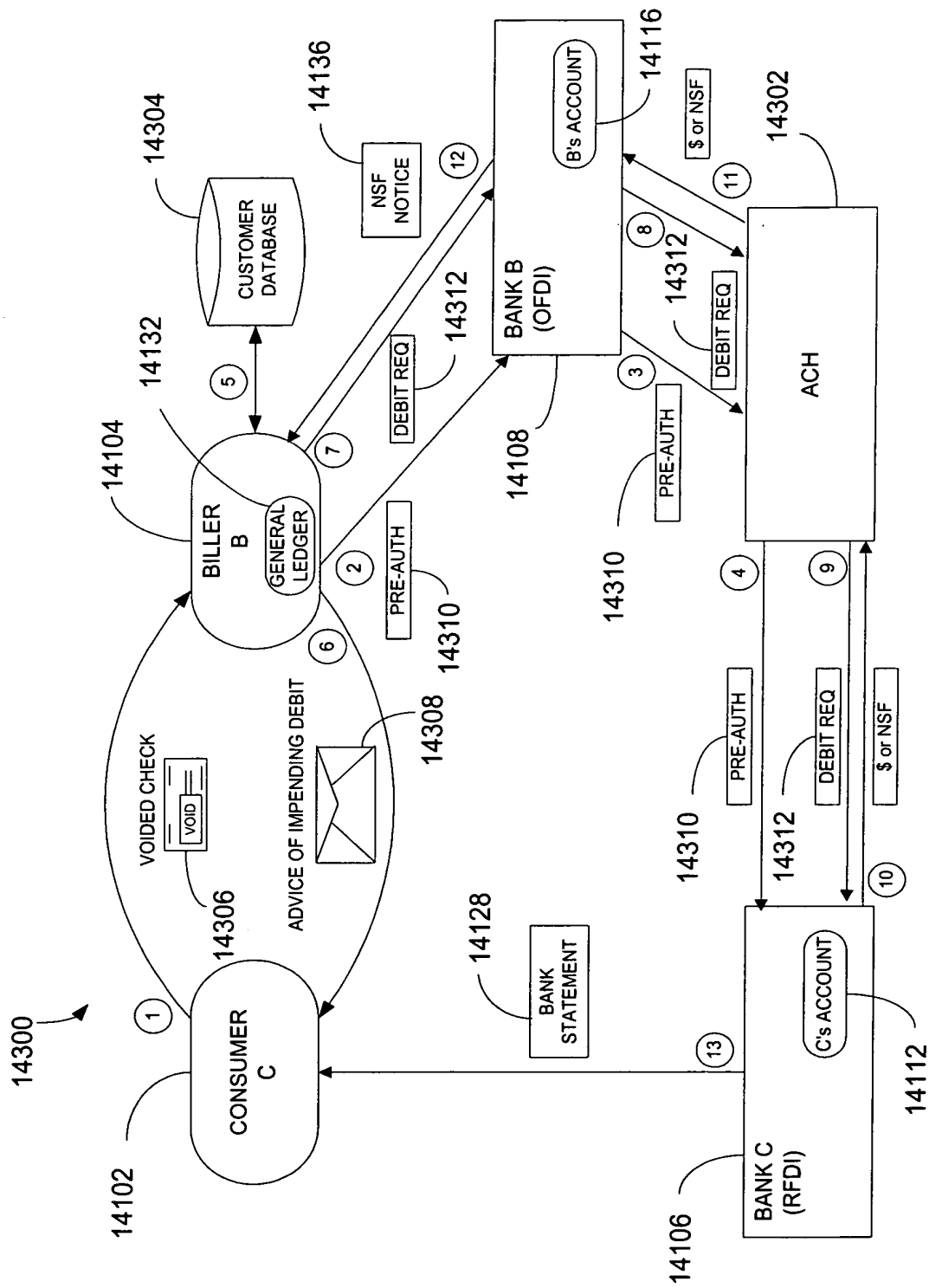


Figure 143